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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 02	STN pricing information for 2008 now available
NEWS	3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	5	JAN 28	MARPAT searching enhanced
NEWS	6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB 08	STN Express, Version 8.3, now available
NEWS	10	FEB 20	PCI now available as a replacement to DPCI
NEWS	11	FEB 25	IFIREF reloaded with enhancements
NEWS	12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	14	MAR 31	IFICDB, IFIPAT, and IFIUIDB enhanced with new custom IPC display formats
NEWS	15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	16	MAR 31	CA/CAPLUS and CASREACT patent number format for U.S. applications updated
NEWS	17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS	18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS	22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS	23	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS	24	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS	25	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS	26	JUN 06	KOREAPAT updated with 41,000 documents
NEWS	27	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS	28	JUN 19	CAS REGISTRY includes selected substances from web-based collections

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:53:23 ON 24 JUN 2008

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 15:53:49 ON 24 JUN 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 JUN 2008 HIGHEST RN 1030103-54-8

DICTIONARY FILE UPDATES: 23 JUN 2008 HIGHEST RN 1030103-54-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

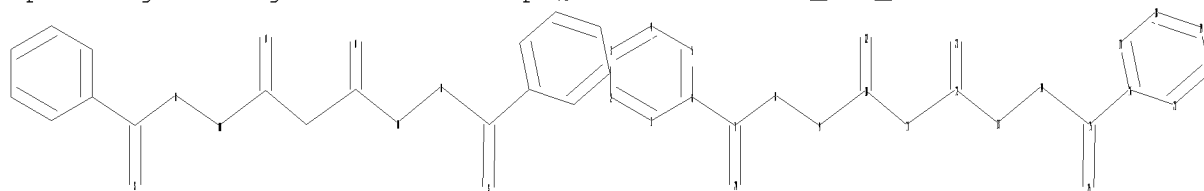
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10758589_NEW_20080624.str



chain nodes :

7 8 9 10 11 12 13 14 15 22 23 24 25

```

ring nodes :
1  2  3  4  5  6  16  17  18  19  20  21
chain bonds :
6-7  7-8  7-24  8-9  9-10  10-11  10-22  11-12  12-13  12-23  13-14  14-15  15-16
15-25
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  16-17  16-21  17-18  18-19  19-20  20-21
exact/norm bonds :
7-8  7-24  8-9  9-10  10-22  12-13  12-23  13-14  14-15  15-25
exact bonds :
6-7  10-11  11-12  15-16
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  16-17  16-21  17-18  18-19  19-20  20-21

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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom
19:Atom 20:Atom 21:Atom 22:CLASS 23:CLASS 24:CLASS 25:CLASS

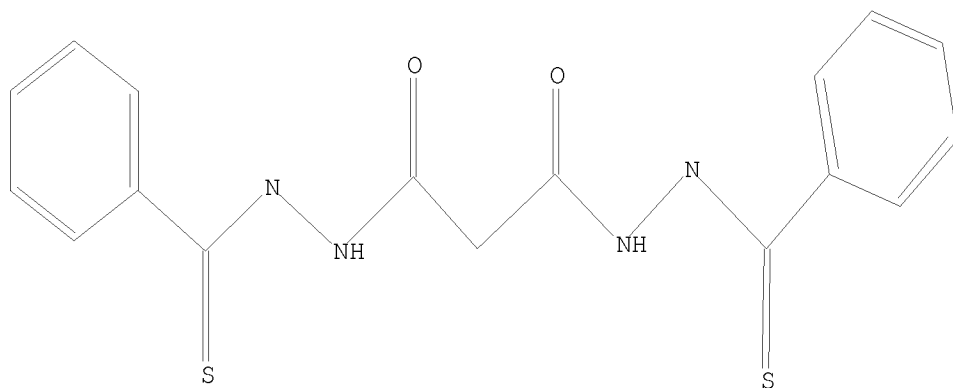
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L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

FULL SEARCH INITIATED 15:54:08 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 380 TO ITERATE

100.0% PROCESSED 380 ITERATIONS

111 ANSWERS

SEARCH TIME: 00.00.01

L2 111 SEA SSS FUL L1

=> file medline caplus wpids uspatfull

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'MEDLINE' ENTERED AT 15:54:19 ON 24 JUN 2008

FILE 'CAPLUS' ENTERED AT 15:54:19 ON 24 JUN 2008
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FILE 'WPIDS' ENTERED AT 15:54:19 ON 24 JUN 2008
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FILE 'USPATFULL' ENTERED AT 15:54:19 ON 24 JUN 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 12

SAMPLE SEARCH INITIATED 15:54:22 FILE 'WPIDS'
SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 8 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 22 TO 238
PROJECTED ANSWERS: 8 TO 164

L3 44 L2

=> s 13 and (cancer or tumor)

L4 28 L3 AND (CANCER OR TUMOR)

=> s 14 and "multi-drug"

L5 7 L4 AND "MULTI-DRUG"

=> d 15 1-7 ibib, abs, hitstr

L5 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

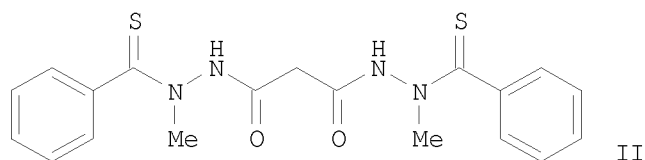
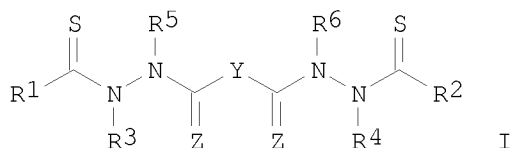
ACCESSION NUMBER: 2004:633518 CAPLUS
DOCUMENT NUMBER: 141:173877
TITLE: A preparation of malonyl dihydrazide derivatives,
useful for the treatment of multi-
drug resistant cancer
INVENTOR(S): Koya, Keizo; Sun, Lijun; Wu, Yaming; Korbut, Timoty;
Zhou, Dan; Du, Zhenjian; Chen, Shoujun; Tatsuta,
Noriaki; Liang, Guiqing; Ono, Mitsunori
PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA
SOURCE: PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004064826	A1	20040805	WO 2004-US1089	20040115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
AU 2004206865	A1	20040805	AU 2004-206865	20040115
AU 2004206865	B2	20060713		
CA 2512797	A1	20040805	CA 2004-2512797	20040115

US 20040225016	A1	20041111	US 2004-758589	20040115
EP 1583524	A1	20051012	EP 2004-702560	20040115
EP 1583524	B1	20060823		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006515626	T	20060601	JP 2006-500976	20040115
AT 336991	T	20060915	AT 2004-702560	20040115
ES 2271839	T3	20070416	ES 2004-702560	20040115
HK 1084024	A1	20070119	HK 2006-104252	20060407
AU 2006228035	A1	20061102	AU 2006-228035	20061011
PRIORITY APPLN. INFO.:			US 2003-440406P	P 20030115
			AU 2004-206865	A3 20040115
			WO 2004-US1089	W 20040115

OTHER SOURCE(S): MARPAT 141:173877

GI



AB One embodiment of the present invention is a method of treating a subject with a multi-drug resistant cancer. The method comprises administering to the subject an effective amount of a compound represented by formula I [wherein: Y is a covalent bond or (un)substituted straight chained hydrocarbonyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is (un)substituted aromatic group; R1-R4 are independently H, aliphatic group, substituted aliphatic group, or aryl group, etc.; R5 and R6 are independently H, aliphatic group, substituted aliphatic group, (un)substituted aryl group; Z is O or S]. For instance, malonyl dihydrazide derivative II (IC50 = 0.005 μ M, multi-drug cell line MES-SA/DX5) was prepared via amidation of malonic acid by PhC(:S)N(Me)NH2 with a yield of 80% (example 4).

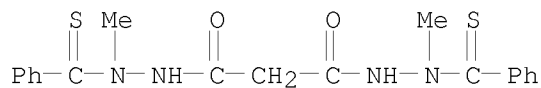
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489475-30-1P 733001-73-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of malonyl dihydrazide derivs. useful for treating multi-drug resistant cancer)

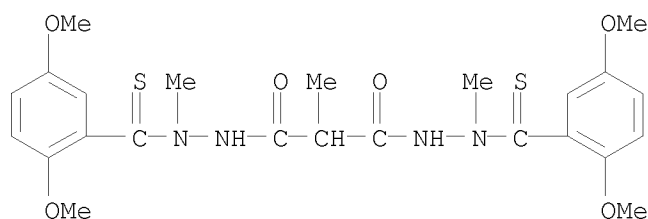
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CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



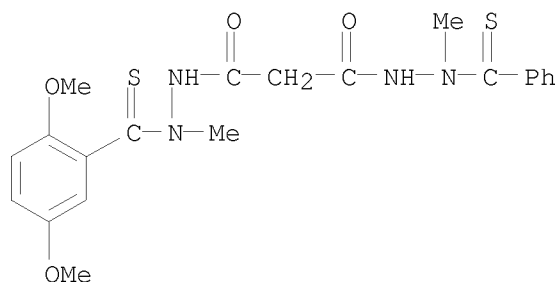
RN 488832-70-8 CAPLUS

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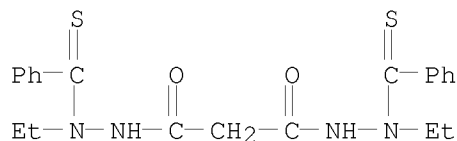
RN 488832-71-9 CAPLUS

CN Propanedioic acid, 1-[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] 3-[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



RN 488832-73-1 CAPLUS

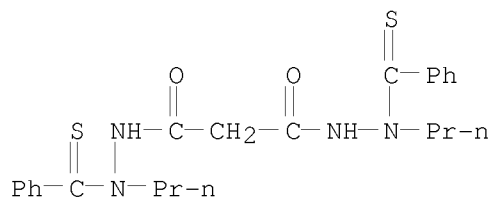
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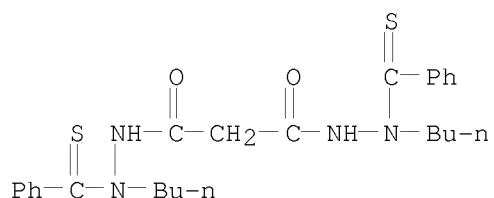
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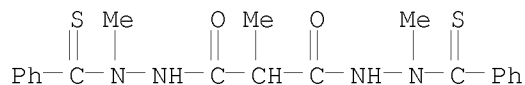
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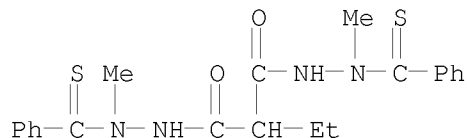
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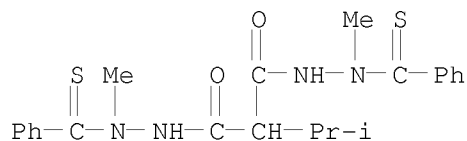
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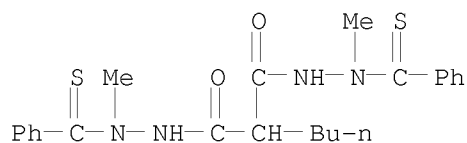


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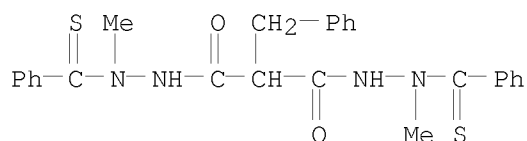
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(9CI) (CA INDEX NAME)



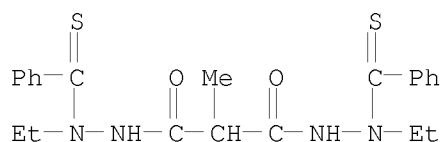
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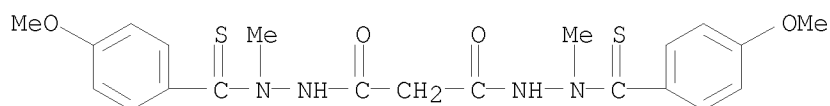
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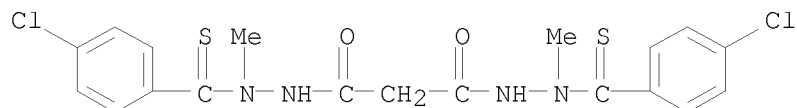
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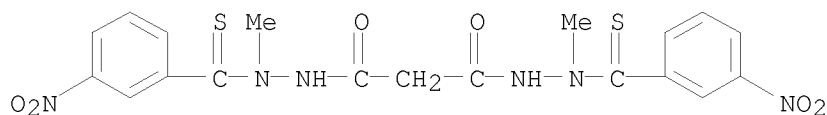
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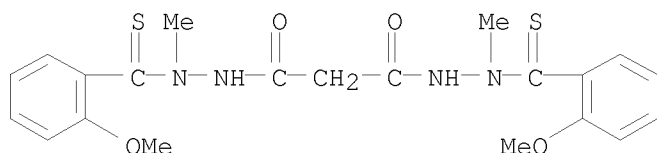


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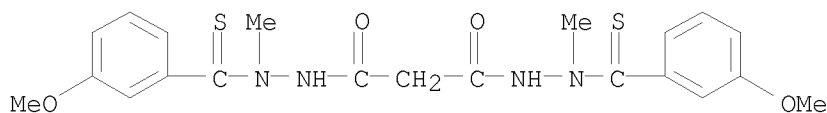
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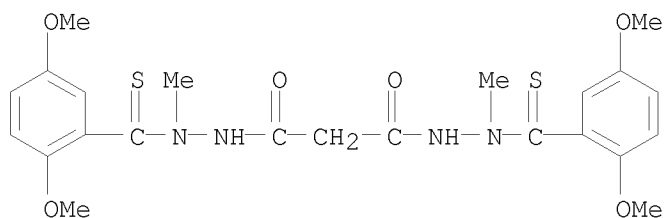
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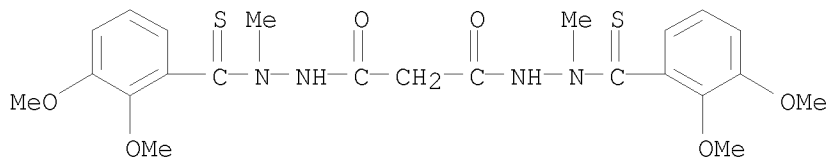
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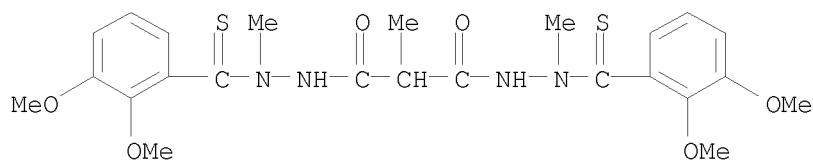
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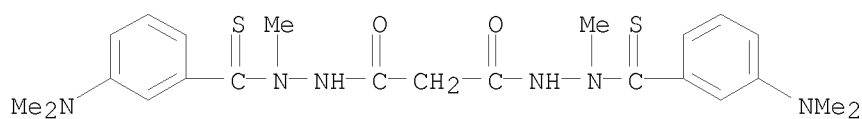


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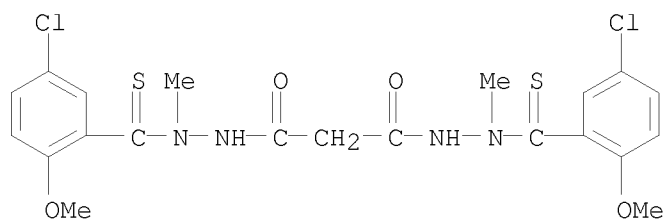
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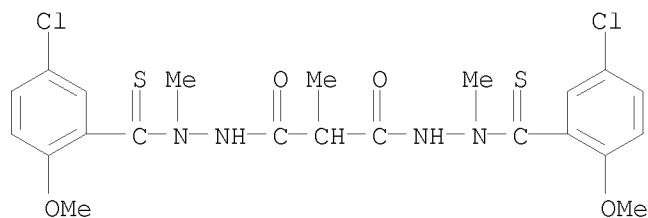
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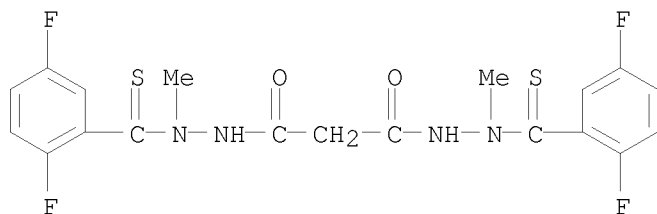
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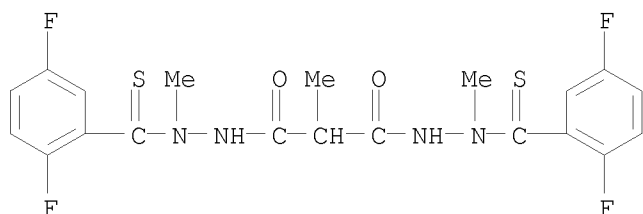
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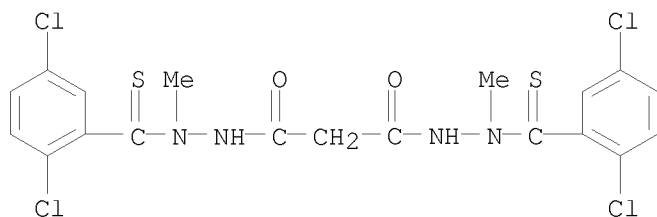
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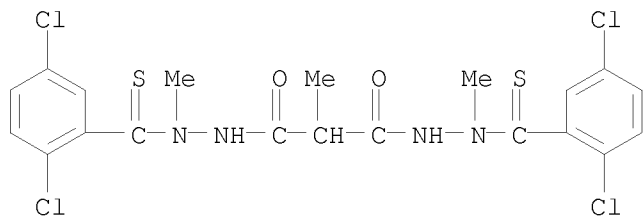
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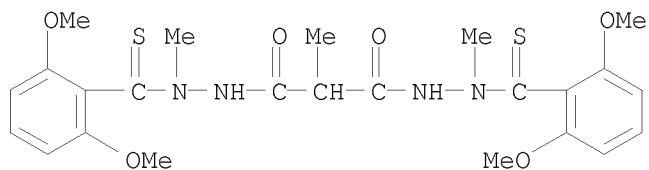
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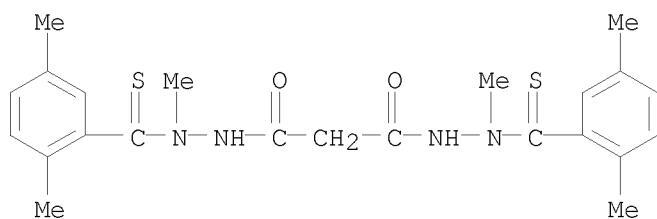
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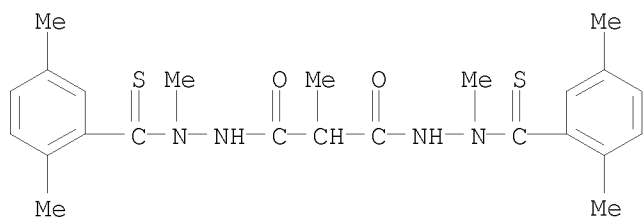
RN 488833-02-9 CAPLUS

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



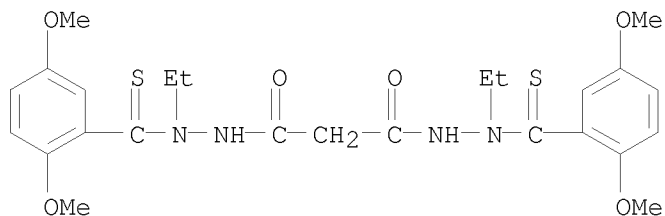
RN 488833-03-0 CAPLUS

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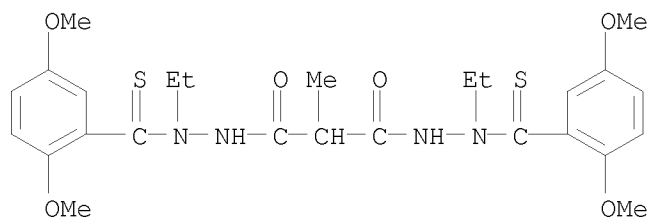
RN 488833-04-1 CAPLUS

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-ethylhydrazide] (CA INDEX NAME)



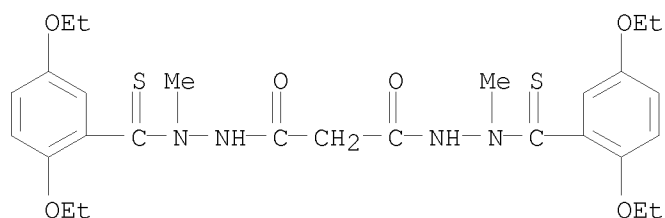
RN 488833-05-2 CAPLUS

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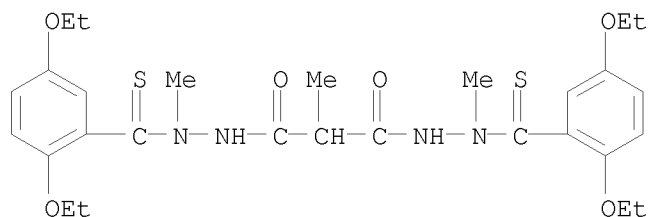
RN 488833-06-3 CAPLUS

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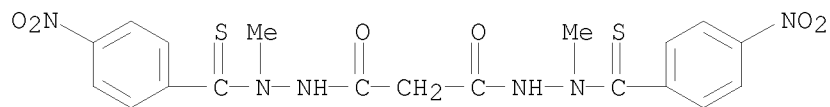
RN 488833-07-4 CAPLUS

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-diethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



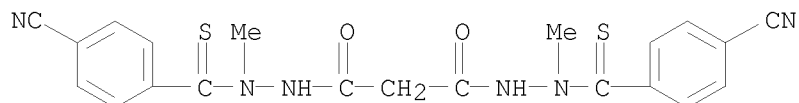
RN 488833-08-5 CAPLUS

CN Propanedioic acid, 1,3-bis[2-methyl-2-[(4-nitrophenyl)thioxomethyl]hydrazide] (CA INDEX NAME)

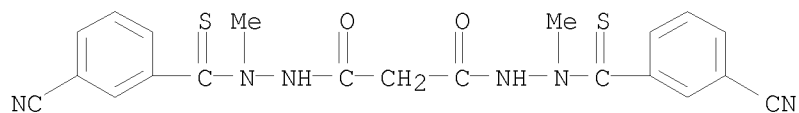


RN 488833-09-6 CAPLUS

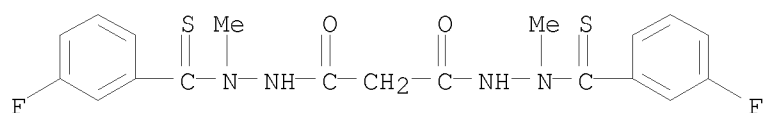
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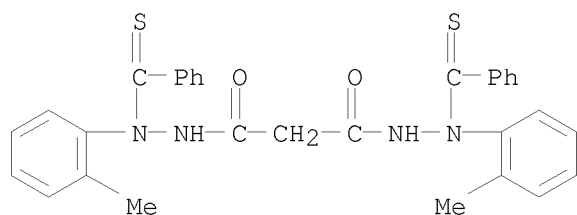
RN 488833-11-0 CAPLUS
 CN Propanedioic acid, 1,3-bis[2-[(3-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



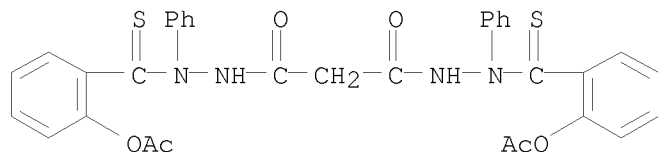
RN 488833-12-1 CAPLUS
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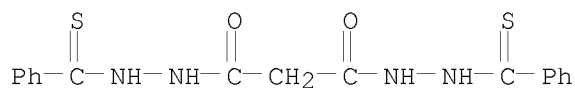
RN 488833-21-2 CAPLUS
 CN Propanedioic acid, 1,3-bis[2-(2-methylphenyl)-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



RN 488833-22-3 CAPLUS
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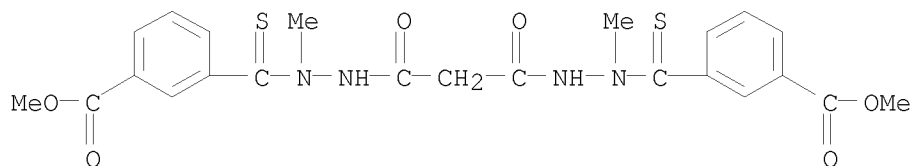


RN 489475-27-6 CAPLUS
 CN Propanedioic acid, bis[2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



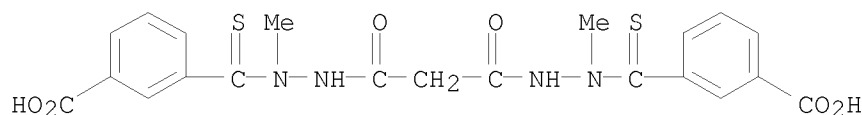
RN 489475-29-8 CAPLUS
 CN Propanedioic acid, bis[2-[[3-(methoxycarbonyl)phenyl]thioxomethyl]-2-

methylhydrazide] (9CI) (CA INDEX NAME)



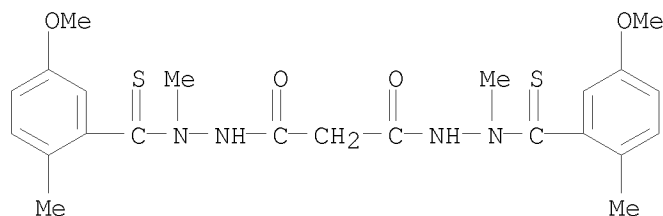
RN 489475-30-1 CAPLUS

CN Propanedioic acid, bis[2-[(3-carboxyphenyl)thioxomethyl]-2-methylhydrazide] (9CI) (CA INDEX NAME)



RN 733001-73-5 CAPLUS

CN Propanedioic acid, 1,3-bis[2-[(5-methoxy-2-methylphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



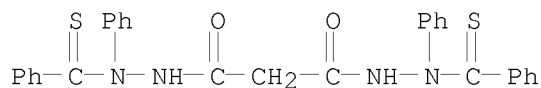
IT 488832-82-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of malonyl dihydrazide derivs. useful for treating multi-drug resistant cancer)

RN 488832-82-2 CAPLUS

CN Propanedioic acid, 1,3-bis[2-phenyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 7 USPATFULL on STN

ACCESSION NUMBER: 2008:137371 USPATFULL

TITLE: Combination with Bis(thiohydrazide amides) for treating cancer

INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 20080119440 A1 20080522
 APPLICATION INFO.: US 2007-897538 A1 20070830 (11)

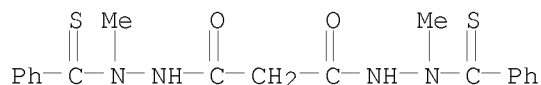
	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-841570P	20060831 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	3983	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

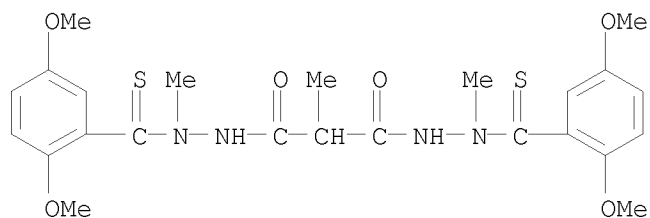
AB Disclosed herein are methods of treating a proliferative disease, such as cancer, with bis(thio-hydrazide amides) or a tautomer, pharmaceutically acceptable salt, solvate, clathrate, or prodrug thereof, in combination with hyperthermia treatment. Also disclosed are methods of treating a proliferative disease, such as cancer, with bis(thio-hydrazide amides) or a tautomer, pharmaceutically acceptable salt, solvate, clathrate, or prodrug thereof, in combination with radiotherapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

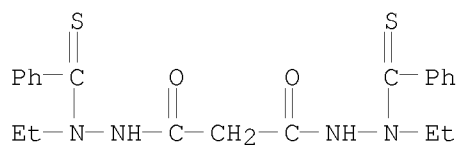
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 488832-91-3 488832-92-4 488832-93-5
 488832-97-9 488832-98-0 488832-99-1
 488833-02-9 488833-09-6 488833-11-0
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 874477-80-2 874477-81-3 874477-82-4
 874477-83-5 874478-05-4 1008758-31-3
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 1008758-39-1 1008758-41-5 1008758-47-1
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 1009063-64-2 1009063-69-7 1009063-74-4
 1009063-76-6 1009063-78-8 1009063-80-2
 (combination with bis(thiohydrazide amides) for treating cancer)
 RN 488832-69-5 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



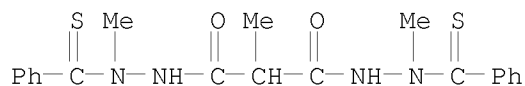
RN 488832-70-8 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



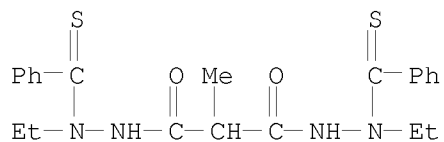
RN 488832-73-1 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



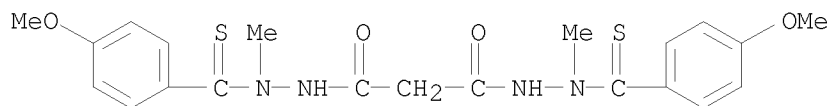
RN 488832-76-4 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



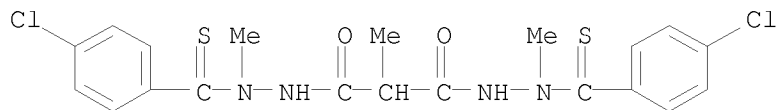
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 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



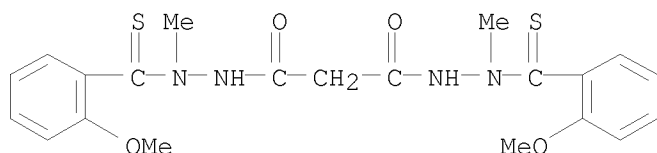
RN 488832-83-3 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(4-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



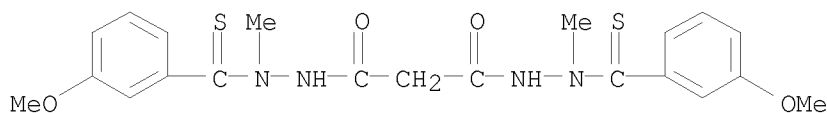
RN 488832-85-5 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-chlorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



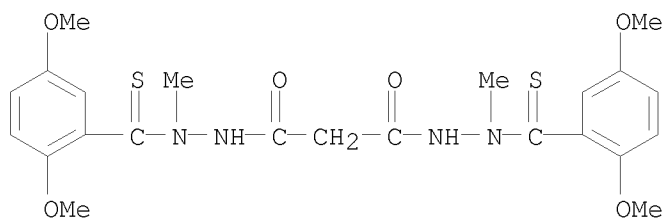
RN 488832-87-7 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



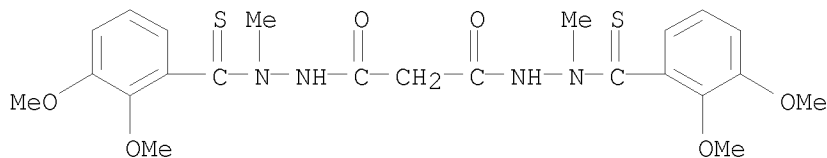
RN 488832-88-8 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(3-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



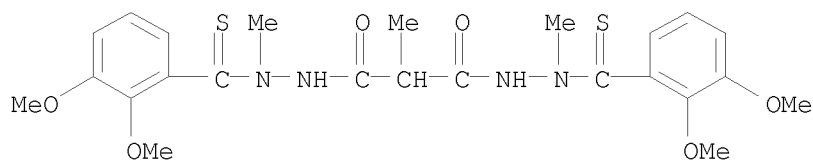
RN 488832-91-3 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



RN 488832-92-4 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)

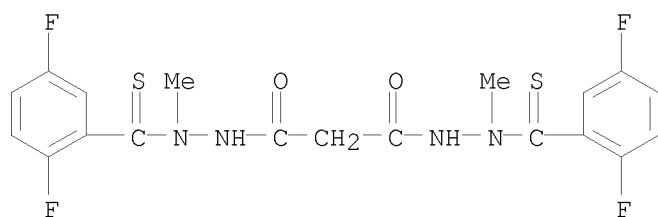


RN 488832-93-5 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



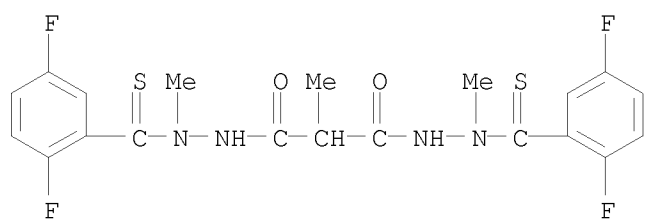
RN 488832-97-9 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



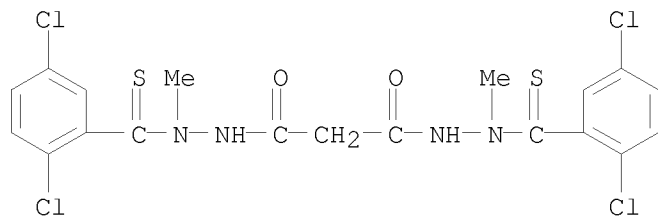
RN 488832-98-0 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



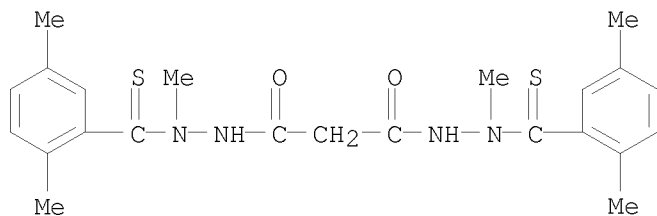
RN 488832-99-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dichlorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



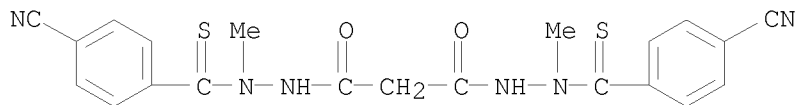
RN 488833-02-9 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethylphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



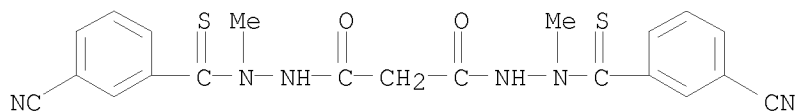
RN 488833-09-6 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



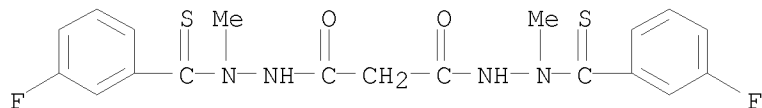
RN 488833-11-0 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(3-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



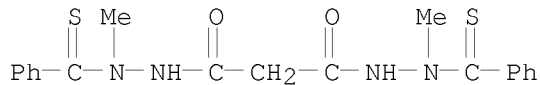
RN 488833-12-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(3-fluorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



RN 874477-51-7 USPATFULL

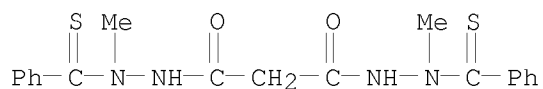
CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-58-4 USPATFULL

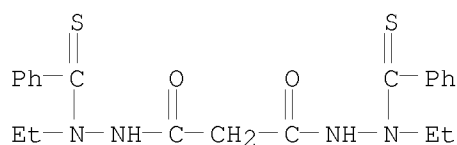
CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 874477-65-3 USPATFULL

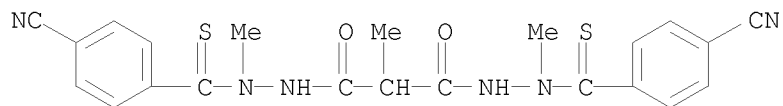
CN Propanedioic acid, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-66-4 USPATFULL

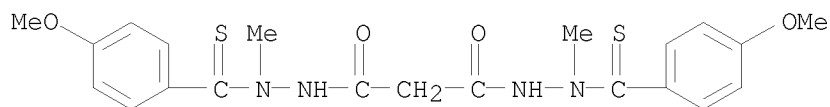
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-67-5 USPATFULL

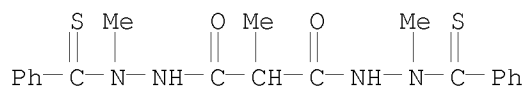
CN Propanedioic acid, 1,3-bis[2-[(4-methoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-68-6 USPATFULL

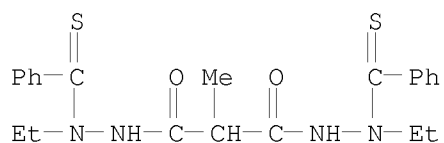
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-69-7 USPATFULL

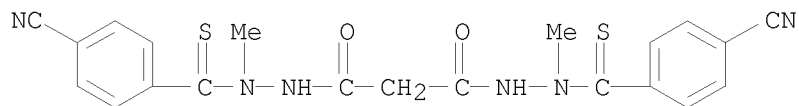
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-70-0 USPATFULL

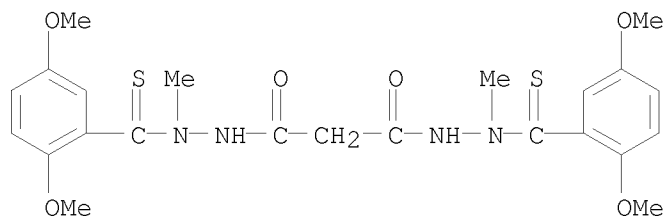
CN Propanedioic acid, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-71-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)

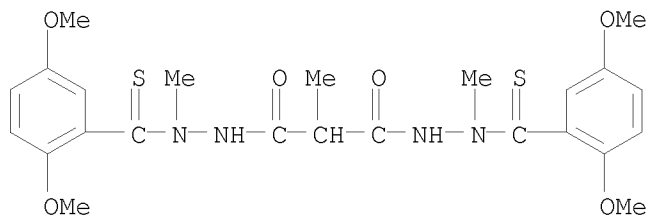


●2 Na

RN 874477-72-2 USPATFULL

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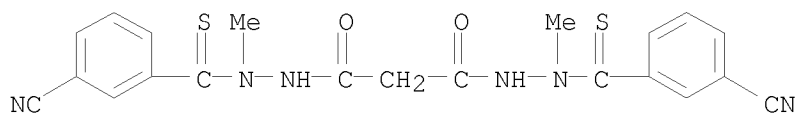
dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-73-3 USPATFULL

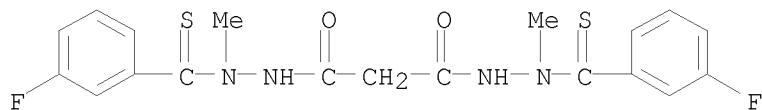
CN Propanedioic acid, 1,3-bis[2-[(3-cyanophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-74-4 USPATFULL

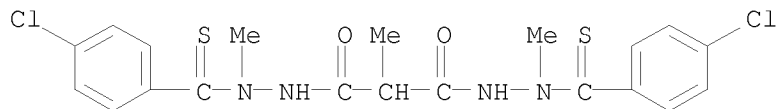
CN Propanedioic acid, 1,3-bis[2-[(3-fluorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-75-5 USPATFULL

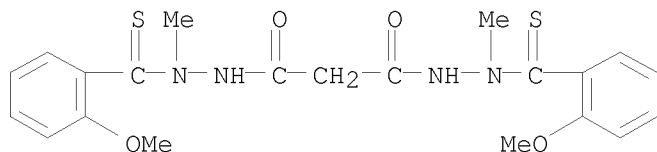
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-chlorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-76-6 USPATFULL

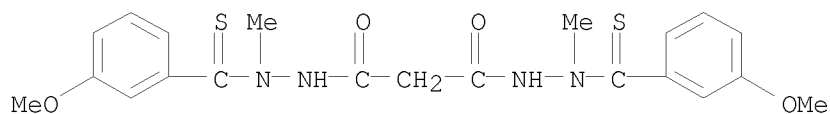
CN Propanedioic acid, 1,3-bis[2-[(2-methoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-77-7 USPATFULL

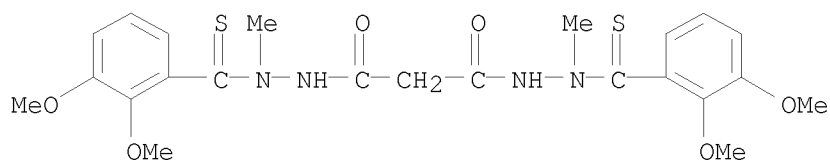
CN Propanedioic acid, 1,3-bis[2-[(3-methoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-78-8 USPATFULL

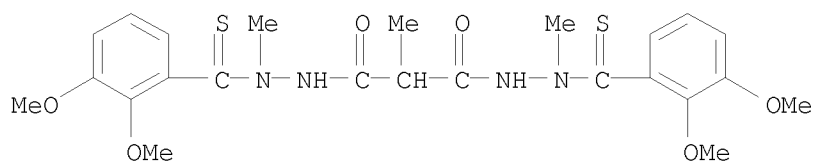
CN Propanedioic acid, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-79-9 USPATFULL

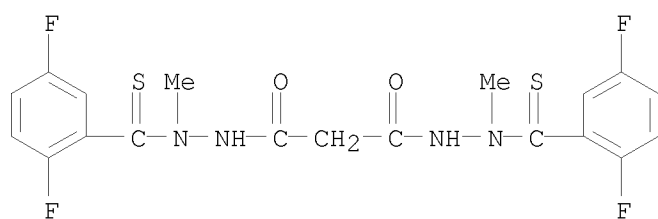
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-80-2 USPATFULL

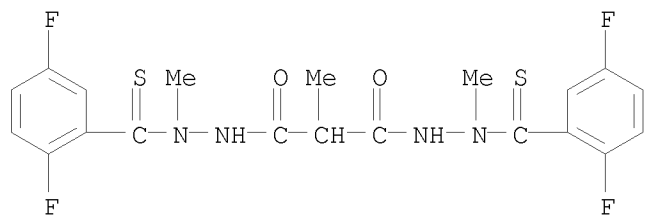
CN Propanedioic acid, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-81-3 USPATFULL

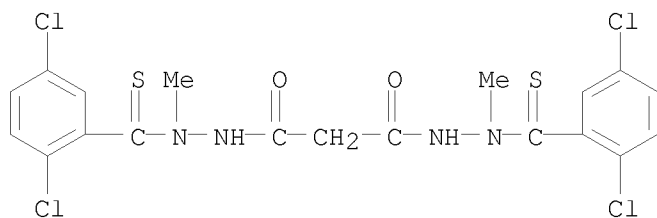
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 874477-82-4 USPATFULL

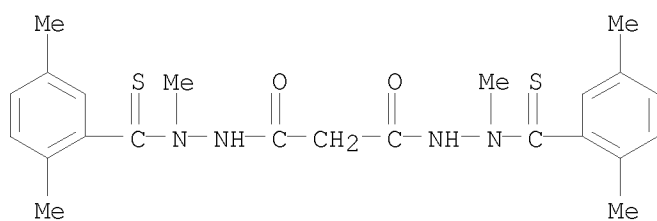
CN Propanedioic acid, 1,3-bis[2-[(2,5-dichlorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-83-5 USPATFULL

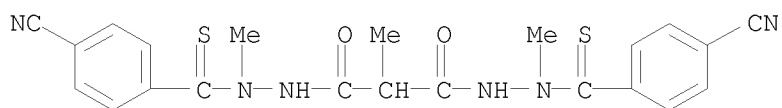
CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethylphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

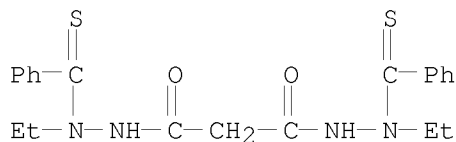
RN 874478-05-4 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



RN 1008758-31-3 USPATFULL

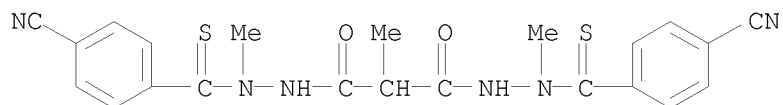
CN Propanedioic acid, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide], potassium salt (1:2) (CA INDEX NAME)



●2 K

RN 1008758-33-5 USPATFULL

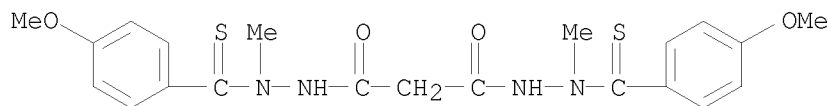
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-35-7 USPATFULL

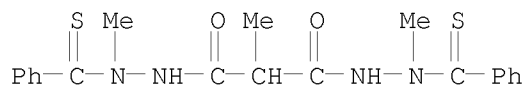
CN Propanedioic acid, 1,3-bis[2-[(4-methoxyphenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-37-9 USPATFULL

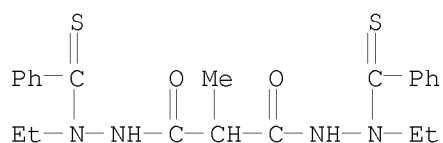
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-39-1 USPATFULL

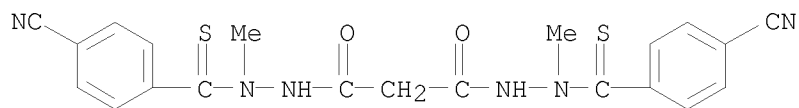
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-41-5 USPATFULL

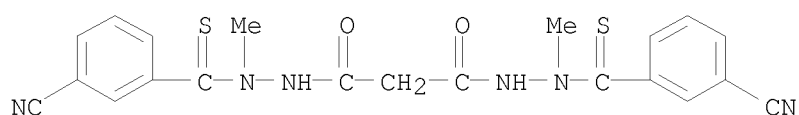
CN Propanedioic acid, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-47-1 USPATFULL

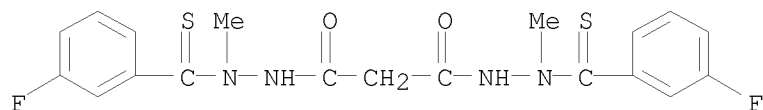
CN Propanedioic acid, 1,3-bis[2-[(3-cyanophenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-49-3 USPATFULL

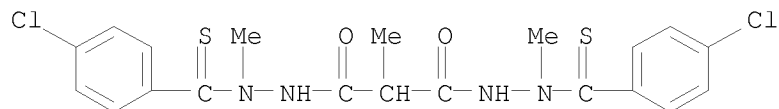
CN Propanedioic acid, 1,3-bis[2-[(3-fluorophenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-51-7 USPATFULL

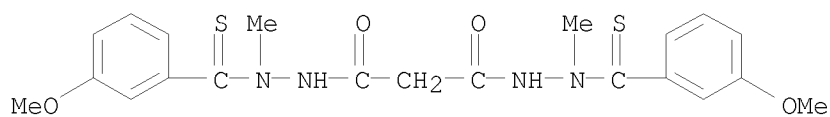
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-chlorophenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-53-9 USPATFULL

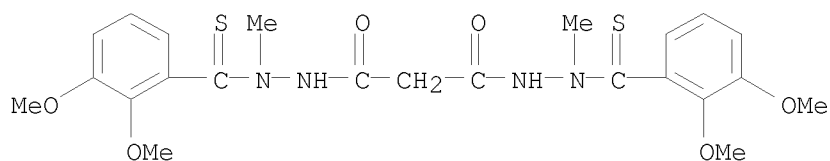
CN Propanedioic acid, 1,3-bis[2-[(3-methoxyphenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-55-1 USPATFULL

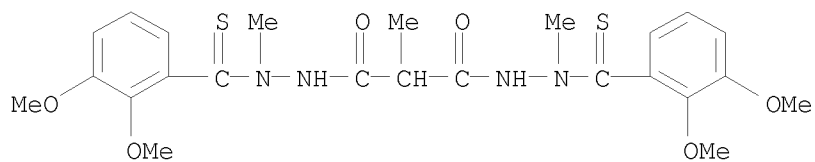
CN Propanedioic acid, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1008758-57-3 USPATFULL

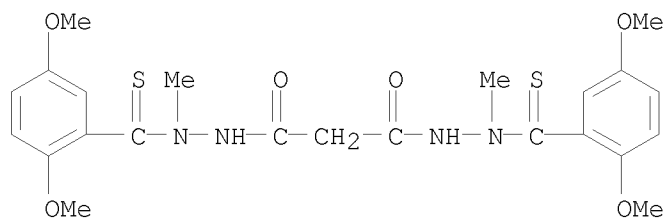
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

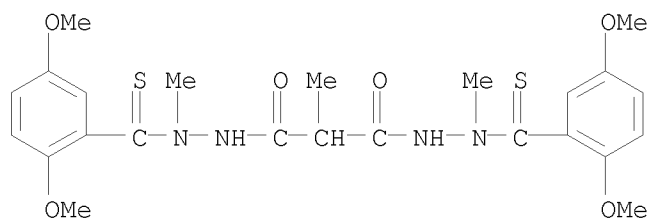
RN 1009063-62-0 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



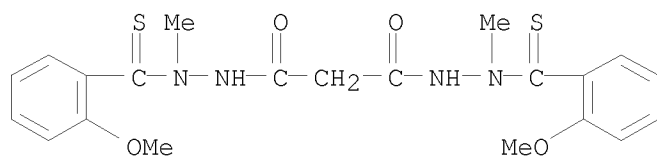
● 2 K

RN 1009063-64-2 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2)
 (CA INDEX NAME)



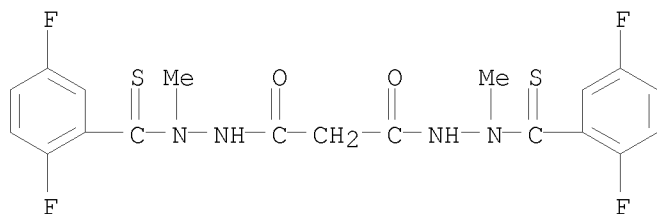
● 2 K

RN 1009063-69-7 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2-methoxyphenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

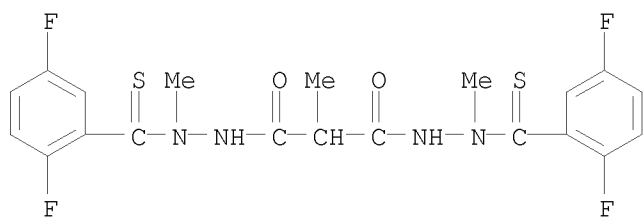
RN 1009063-74-4 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1009063-76-6 USPATFULL

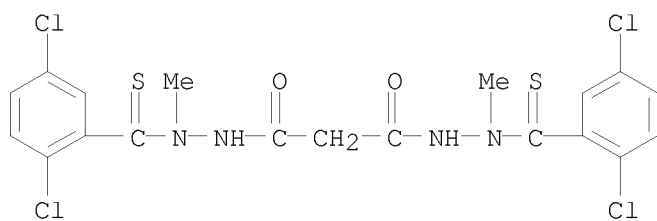
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1009063-78-8 USPATFULL

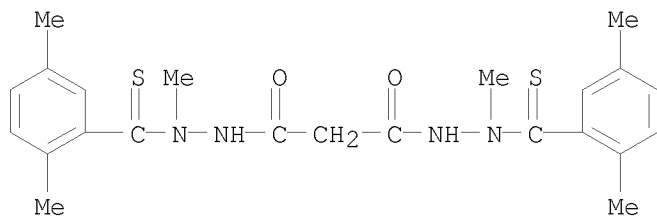
CN Propanedioic acid, 1,3-bis[2-[(2,5-dichlorophenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

RN 1009063-80-2 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethylphenyl)thioxomethyl]-2-methylhydrazide], potassium salt (1:2) (CA INDEX NAME)



● 2 K

L5 ANSWER 3 OF 7 USPATFULL on STN

ACCESSION NUMBER: 2008:136493 USPATFULL

TITLE: Bis(thiohydrazide amides) formulation

INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080118562	A1	20080522
APPLICATION INFO.:	US 2007-900201	A1	20070910 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-843941P	20060911 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	60	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2850	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

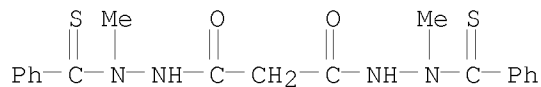
AB Disclosed herein are compositions and methods useful for the in vivo delivery bis(thiohydrazide amides), encased in a polymeric biocompatible shell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 488832-69-5 874477-51-7 874477-58-4
(bis(thiohydrazide amides) formulation)

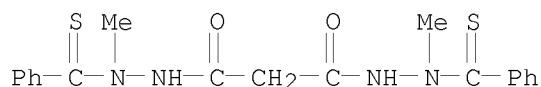
RN 488832-69-5 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



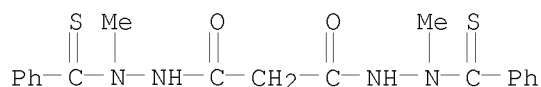
RN 874477-51-7 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-58-4 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide],
 potassium salt (1:2) (CA INDEX NAME)



●2 K

L5 ANSWER 4 OF 7 USPATFULL on STN
 ACCESSION NUMBER: 2007:101208 USPATFULL
 TITLE: Bis(thio-hydrazide amide) formulation
 INVENTOR(S): Lunsmann, Walter J., Harvard, MA, UNITED STATES
 Deshpanday, Ninad, Cary, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20070088057	A1	20070419
APPLICATION INFO.:	US 2006-502590	A1	20060810 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-708977P	20050816 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	86	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2169	

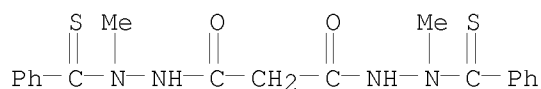
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are compositions comprising a compound represented by structural formula (I): ##STR1## 2 g of which is reconstitutable in 10 mL of a water in less than 10 minutes, and methods for preparing these compositions. Also disclosed are compositions comprising a compound represented by structural formula (I) and a pharmaceutically acceptable excipient, wherein the molar ratio of said compound to said excipient is from 1:20 to 1:1, and methods for preparing these compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 874477-51-7
 (bis(thiohydrazide amide) freeze dried injection)

RN 874477-51-7 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide],
 sodium salt (1:2) (CA INDEX NAME)



●2 Na

L5 ANSWER 5 OF 7 USPATFULL on STN

ACCESSION NUMBER: 2006:167882 USPATFULL

TITLE: Bis(thio-hydrazide amides) for treatment of hyperplasia

INVENTOR(S): Sherman, Matthew L., Newton, MA, UNITED STATES

Vaghefi, Farid, Burlington, MA, UNITED STATES

Chen, Lan Bo, Lexington, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060142393	A1	20060629
APPLICATION INFO.:	US 2005-226929	A1	20050914 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-610270P	20040916 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	44	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	2506	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and medical devices for treating a proliferative disorder in a subject, e.g., restenosis in a blood vessel that has been implanted with a stent, employ a bis(thio-hydrazide amide) represented by Structural Formula I or a pharmaceutically acceptable salt or solvate thereof.

##STR1## Y is a covalent bond or an optionally substituted straight chained hydrocarbyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is an optionally substituted aromatic group.

R.sub.1-R.sub.4 are independently --H, an optionally substituted aliphatic group, an optionally substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring.

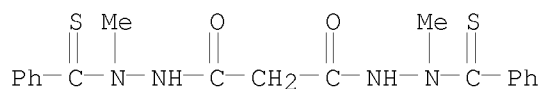
R.sub.7-R.sub.8 are independently --H, an optionally substituted aliphatic group, or an optionally substituted aryl group. Z is O or S.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 488832-69-5 488832-71-9 488832-73-1
 488832-77-5 488832-81-1 488832-82-2
 488832-83-3 488832-91-3 488832-92-4
 488832-93-5 488832-99-1 488833-09-6
 488833-12-1D, derivative 733001-73-5 881184-41-4
 (bis(thiohydrazide amides) for treatment of hyperplasia)

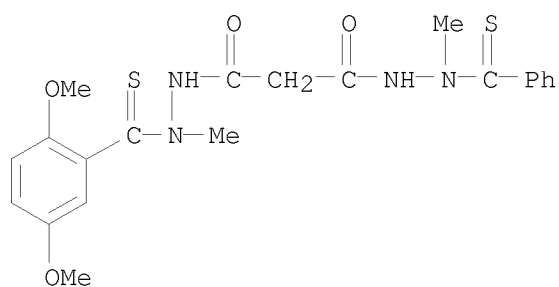
RN 488832-69-5 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



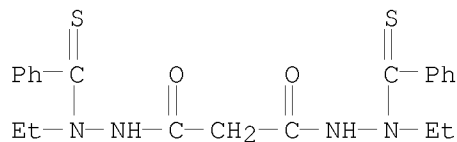
RN 488832-71-9 USPATFULL

CN Propanedioic acid, 1-[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] 3-[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



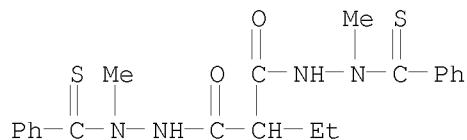
RN 488832-73-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



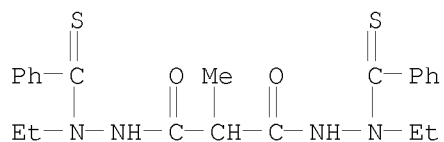
RN 488832-77-5 USPATFULL

CN Propanedioic acid, 2-ethyl-, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)

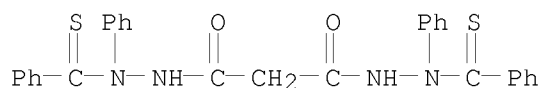


RN 488832-81-1 USPATFULL

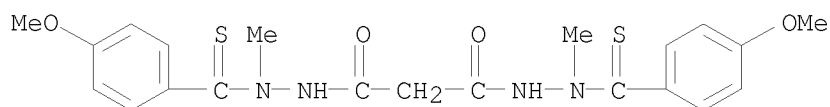
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



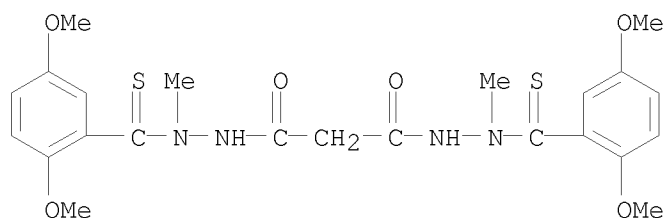
RN 488832-82-2 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-phenyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



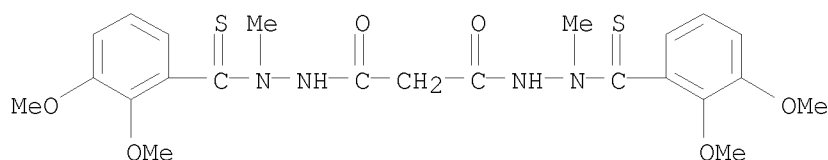
RN 488832-83-3 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(4-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



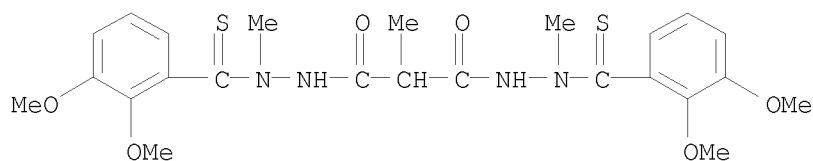
RN 488832-91-3 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



RN 488832-92-4 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)

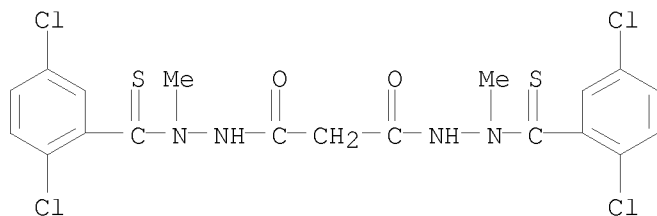


RN 488832-93-5 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



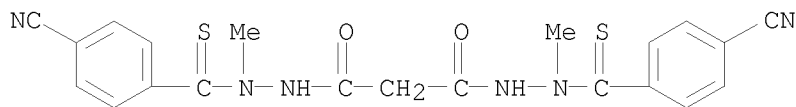
RN 488832-99-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dichlorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



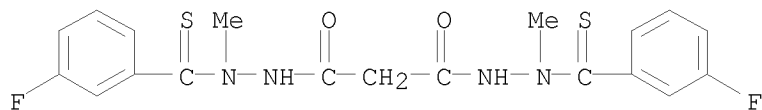
RN 488833-09-6 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



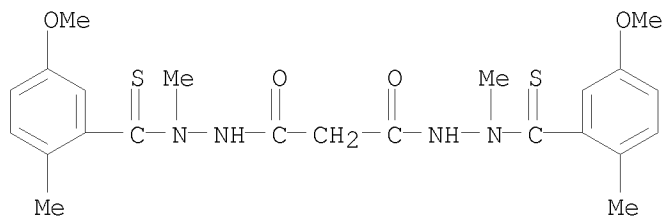
RN 488833-12-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(3-fluorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



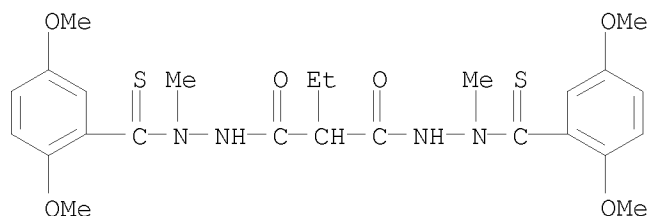
RN 733001-73-5 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(5-methoxy-2-methylphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



RN 881184-41-4 USPATFULL

CN Propanedioic acid, 2-ethyl-, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



L5 ANSWER 6 OF 7 USPATFULL on STN

ACCESSION NUMBER: 2006:160058 USPATFULL

TITLE: Bis(thio-hydrazide amide) salts for treatment of cancers

INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES
 Sun, Lijun, Harvard, MA, UNITED STATES
 Kostik, Elena, Arlington, MA, UNITED STATES
 Vaghefi, Farid, Burlington, MA, UNITED STATES
 Chen, Shoujun, Bedford, MA, UNITED STATES
 Tatsuta, Noriaki, Lexington, MA, UNITED STATES
 Liang, Guiqing, Concord, MA, UNITED STATES
 Inoue, Takayo, Malden, MA, UNITED STATES
 Xia, Zhi-Qiang, Acton, MA, UNITED STATES

PATENT ASSIGNEE(S): Synta Pharmaceuticals, Lexington, MA, UNITED STATES
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060135595	A1	20060622
	US 7385084	B2	20080610
APPLICATION INFO.:	US 2005-157213	A1	20050620 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-582596P	20040623 (60)
	US 2005-681368P	20050516 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	31	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	24 Drawing Page(s)	
LINE COUNT:	2028	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are bis(thio-hydrazide amide) disalts, which are represented by Structural Formula (I): ##STR1##

Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group. R.sub.1-R.sub.4 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. Z is --O or --S. M.sup.+ is a pharmaceutically acceptable monovalent cation and M.sup.2+ is a pharmaceutically acceptable divalent cation. Also, disclosed are pharmaceutical compositions comprising a bis(thio-hydrazide amide) disalt described above. Further disclosed are methods of treating a subject with cancer. The methods

comprise the step of administering an effective amount of a bis(thio-hydrazide amide) disalt described above.

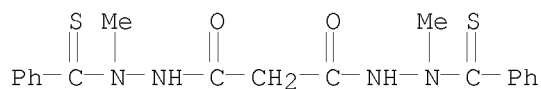
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 874477-51-7P 874477-65-3P 874477-66-4P
 874477-67-5P 874477-68-6P 874477-69-7P
 874477-70-0P 874477-71-1P 874477-72-2P
 874477-73-3P 874477-74-4P 874477-75-5P
 874477-76-6P 874477-77-7P 874477-78-8P
 874477-79-9P 874477-80-2P 874477-81-3P
 874477-82-4P 874477-83-5P

(claimed compound; preparation of bis(thiohydrazide amide) salts for treatment of cancer)

RN 874477-51-7 USPTAFULL

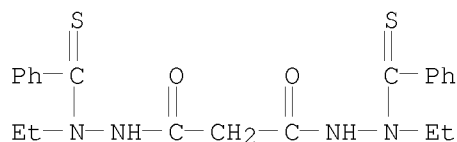
CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-65-3 USPTAFULL

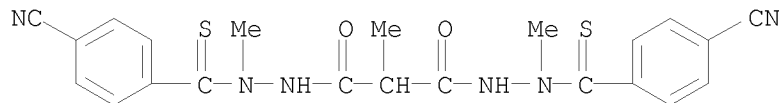
CN Propanedioic acid, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-66-4 USPTAFULL

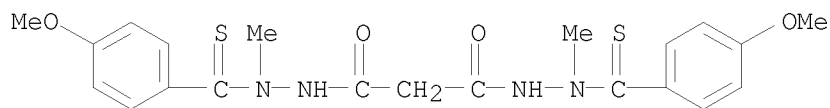
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

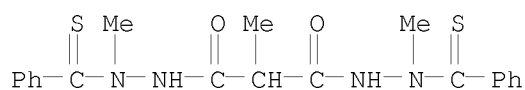
RN 874477-67-5 USPTAFULL

CN Propanedioic acid, 1,3-bis[2-[(4-methoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



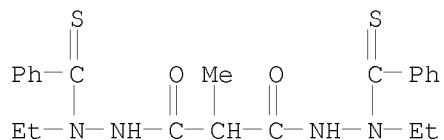
●2 Na

RN 874477-68-6 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



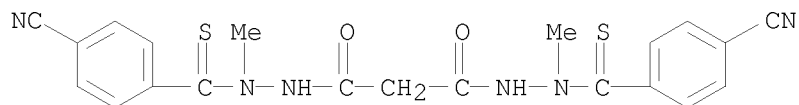
●2 Na

RN 874477-69-7 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:2) (CA INDEX NAME)



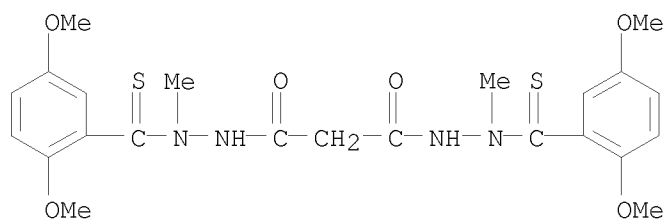
●2 Na

RN 874477-70-0 USPATFULL
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●2 Na

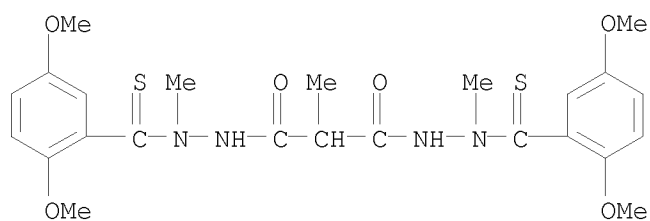
RN 874477-71-1 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-72-2 USPATFULL

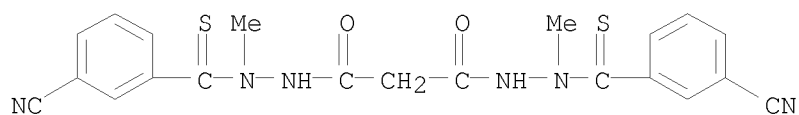
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-73-3 USPATFULL

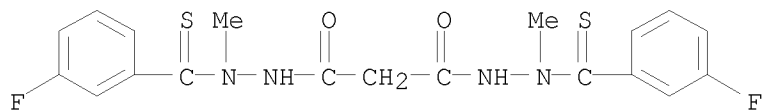
CN Propanedioic acid, 1,3-bis[2-[(3-cyanophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-74-4 USPATFULL

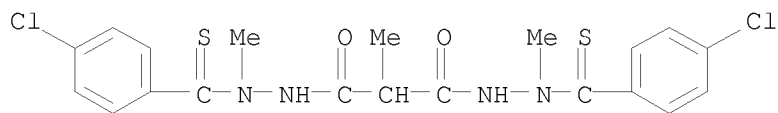
CN Propanedioic acid, 1,3-bis[2-[(3-fluorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-75-5 USPATFULL

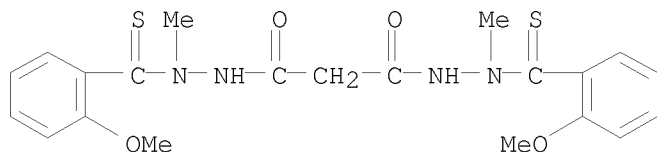
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-chlorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-76-6 USPATFULL

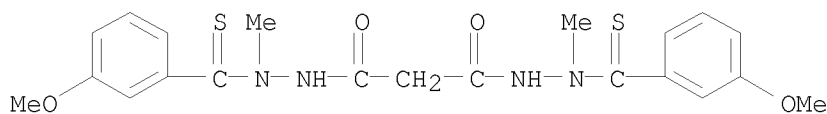
CN Propanedioic acid, 1,3-bis[2-[(2-methoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-77-7 USPATFULL

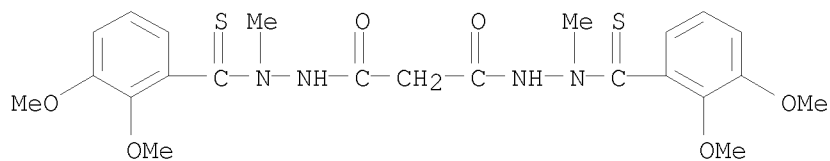
CN Propanedioic acid, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-78-8 USPATFULL

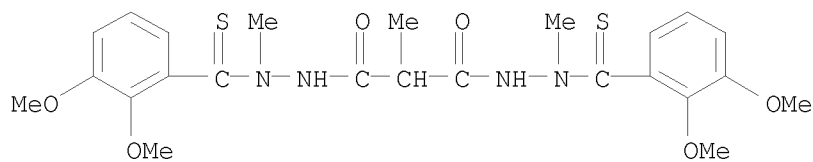
CN Propanedioic acid, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-79-9 USPATFULL

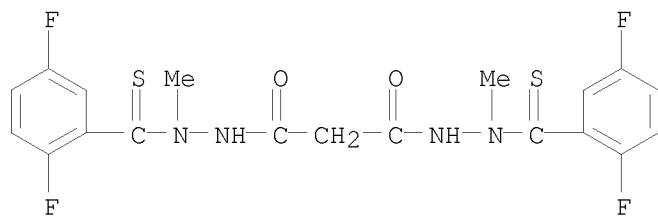
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-80-2 USPATFULL

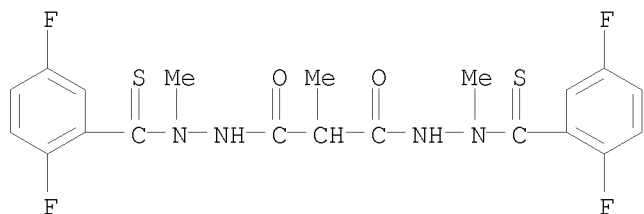
CN Propanedioic acid, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-81-3 USPATFULL

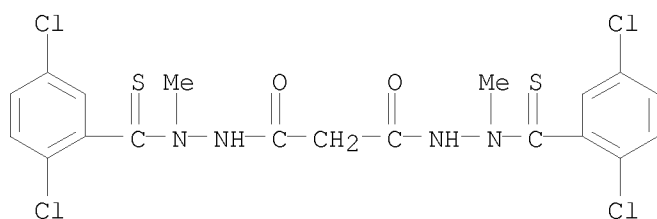
CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-82-4 USPATFULL

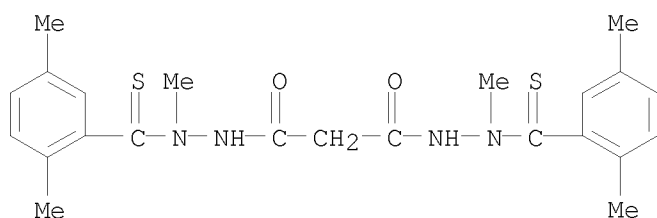
CN Propanedioic acid, 1,3-bis[2-[(2,5-dichlorophenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 874477-83-5 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethylphenyl)thioxomethyl]-2-methylhydrazide], sodium salt (1:2) (CA INDEX NAME)



●2 Na

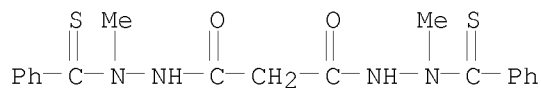
IT 488832-69-5P 874477-54-0P 874477-55-1P

874477-57-3P 874477-58-4P

(preparation of bis(thiohydrazide amide) salts for treatment of cancer)

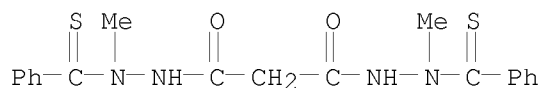
RN 488832-69-5 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



RN 874477-54-0 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide],
lithium salt (1:2) (CA INDEX NAME)



●₂ Li

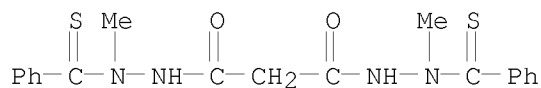
RN 874477-55-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide],
compd. with 2-aminoethanol (1:2) (CA INDEX NAME)

CM 1

CRN 488832-69-5

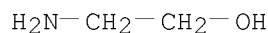
CMF C19 H20 N4 O2 S2



CM 2

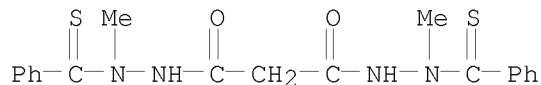
CRN 141-43-5

CMF C2 H7 N O



RN 874477-57-3 USPATFULL

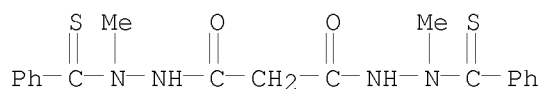
CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide],
calcium salt (1:1) (CA INDEX NAME)



● Ca

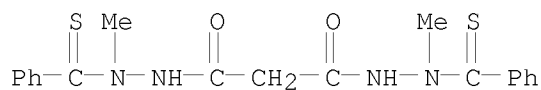
RN 874477-58-4 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide],
potassium salt (1:2) (CA INDEX NAME)

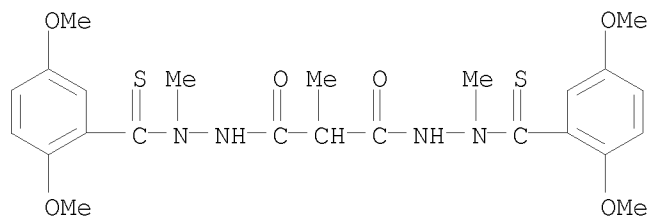


● 2 K

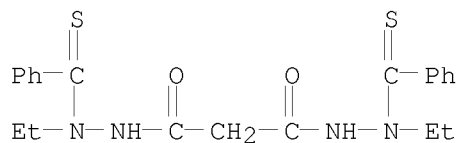
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 488832-76-4 488832-81-1 488832-83-3
 488832-85-5 488832-87-7 488832-88-8
 488832-91-3 488832-92-4 488832-93-5
 488832-97-9 488832-98-0 488832-99-1
 488833-02-9 488833-09-6 488833-11-0
 488833-12-1 874478-05-4
 (preparation of bis(thiohydrazide amide) salts for treatment of cancer)
 RN 488832-69-5 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



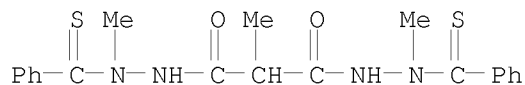
RN 488832-70-8 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



RN 488832-73-1 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)

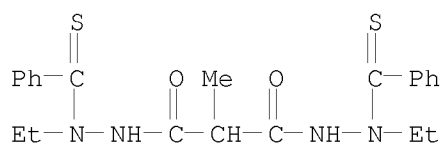


RN 488832-76-4 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



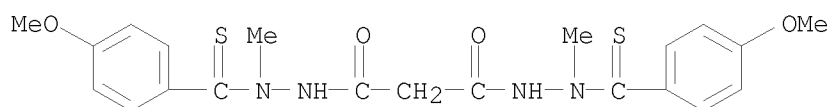
RN 488832-81-1 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



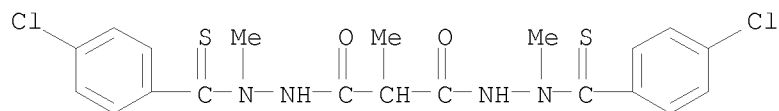
RN 488832-83-3 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(4-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



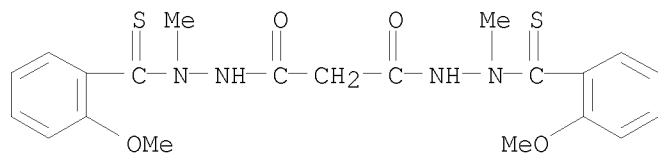
RN 488832-85-5 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-chlorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



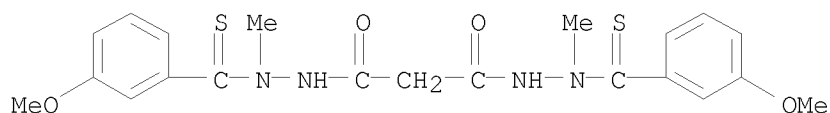
RN 488832-87-7 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



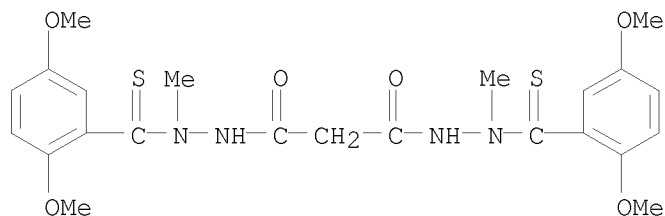
RN 488832-88-8 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(3-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



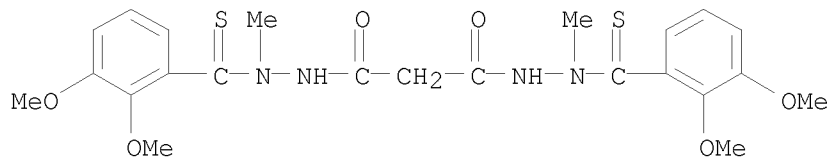
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CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



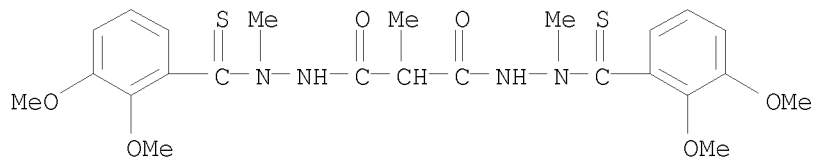
RN 488832-92-4 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



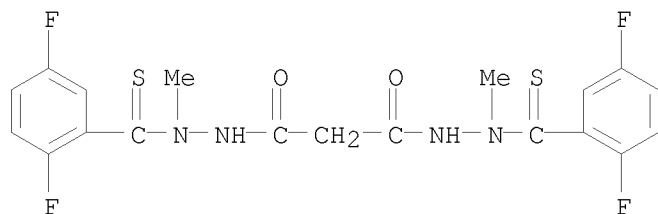
RN 488832-93-5 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



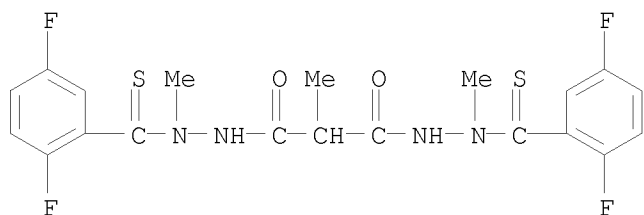
RN 488832-97-9 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



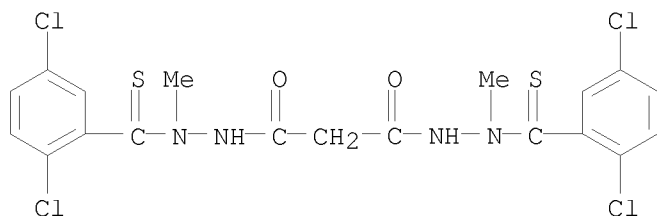
RN 488832-98-0 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-difluorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



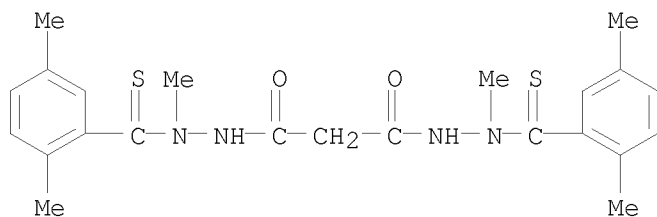
RN 488832-99-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dichlorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



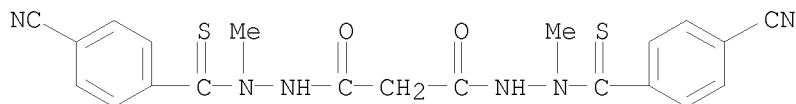
RN 488833-02-9 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethylphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



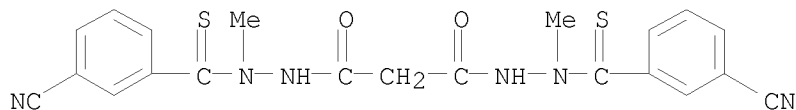
RN 488833-09-6 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



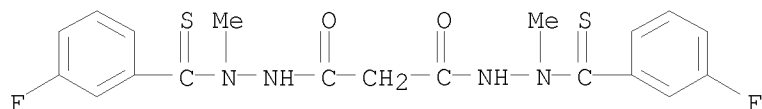
RN 488833-11-0 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(3-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



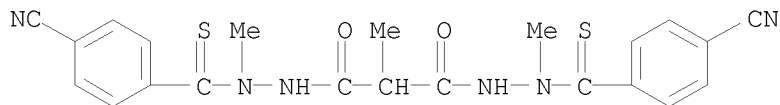
RN 488833-12-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(3-fluorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



RN 874478-05-4 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



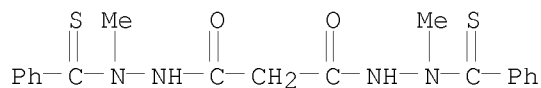
IT 874477-60-8P 874477-61-9P 874477-62-0P

874477-63-1P 874477-64-2P

(preparation of bis(thiohydrazide amide) salts for treatment of cancer)

RN 874477-60-8 USPATFULL

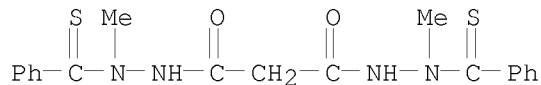
CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], sodium salt (1:1) (CA INDEX NAME)



● Na

RN 874477-61-9 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], lithium salt (1:1) (CA INDEX NAME)



● Li

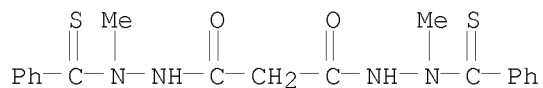
RN 874477-62-0 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide], compd. with 2-aminoethanol (1:1) (CA INDEX NAME)

CM 1

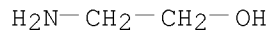
CRN 488832-69-5

CMF C19 H20 N4 O2 S2

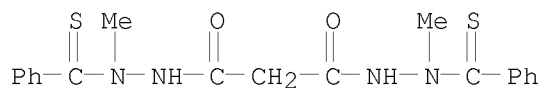


CM 2

CRN 141-43-5
CMF C2 H7 N O



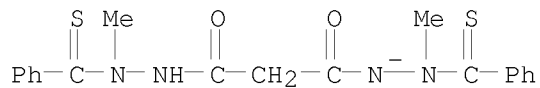
RN 874477-63-1 USPATFULL
CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide],
potassium salt (1:1) (CA INDEX NAME)



RN 874477-64-2 USPATFULL
CN Ethanaminium, 2-hydroxy-N,N,N-trimethyl-, propanedioic acid
1,3-di2-methyl-2-(phenylthioxomethyl)hydrazinylhydrazide (1:1) (CA
INDEX NAME)

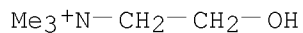
CM 1

CRN 875913-56-7
CMF C19 H19 N4 O2 S2



CM 2

CRN 62-49-7
CMF C5 H14 N O



L5 ANSWER 7 OF 7 USPATFULL on STN
ACCESSION NUMBER: 2004:286848 USPATFULL
TITLE: Treatment for cancers
INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES
Sun, Lijun, Harvard, MA, UNITED STATES

Wu, Yaming, Lexington, MA, UNITED STATES
 Korbuto, Timothy, Brighton, MA, UNITED STATES
 Zhou, Dan, Lexington, MA, UNITED STATES
 Du, Zhenjian, Northborough, MA, UNITED STATES
 Chen, Shoujun, Bedford, MA, UNITED STATES
 Tatsuta, Noriaki, Lexington, MA, UNITED STATES
 Liang, Guiqing, Concord, MA, UNITED STATES
 Ono, Mitsunori, Lexington, MA, UNITED STATES
 Synta Pharmaceuticals Corporation, Lexington, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20040225016	A1	20041111
APPLICATION INFO.:	US 2004-758589	A1	20040115 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-440406P	20030115 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	
LINE COUNT:	2511	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB One embodiment of the present invention is a method of treating a subject with a multi-drug resistant cancer . The method comprises administering to the subject an effective amount of a compound represented by Structural Formula (I): ##STR1##

Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbonyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is a substituted or unsubstituted aromatic group.

R.sub.1-R.sub.4 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. Preferably R.sub.1 and R.sub.2 are the same and R.sub.3 and R.sub.4 are the same.

R.sub.5-R.sub.6 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group.

Z is .dbd.O or .dbd.S.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

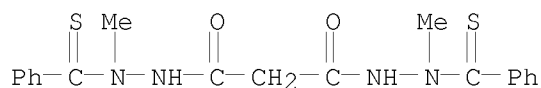
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 488832-79-7P 488832-80-0P 488832-81-1P
 488832-83-3P 488832-84-4P 488832-86-6P
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488833-07-4P 488833-08-5P 488833-09-6P
 488833-11-0P 488833-12-1P 488833-21-2P
 488833-22-3P 489475-27-6P 489475-29-8P
 489475-30-1P 733001-73-5P

(preparation of malonyl dihydrazide derivs. useful for treating multi-drug resistant cancer)

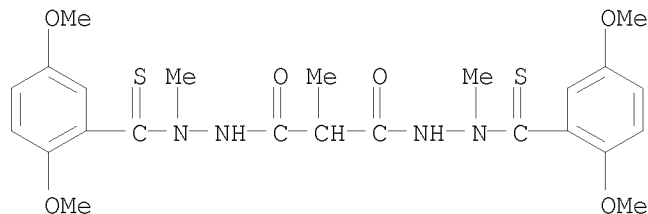
RN 488832-69-5 USPATFULL

CN Propanedioic acid, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



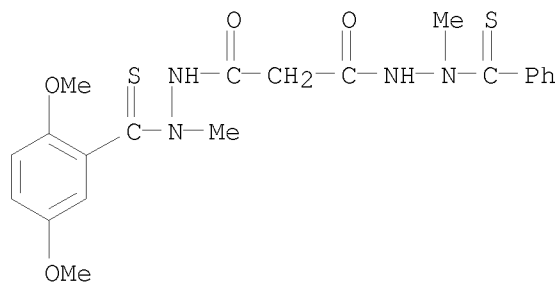
RN 488832-70-8 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



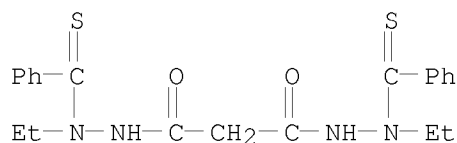
RN 488832-71-9 USPATFULL

CN Propanedioic acid, 1-[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] 3-[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



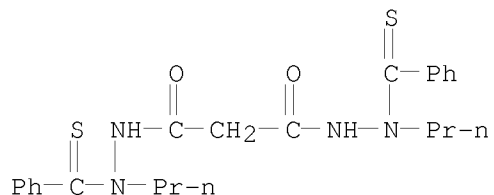
RN 488832-73-1 USPATFULL

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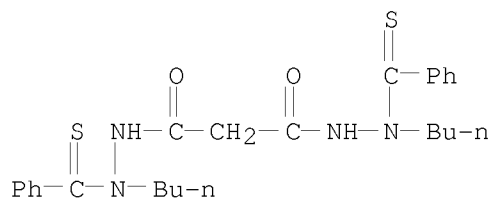
RN 488832-74-2 USPATFULL

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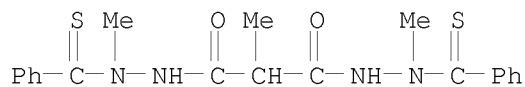
RN 488832-75-3 USPATFULL

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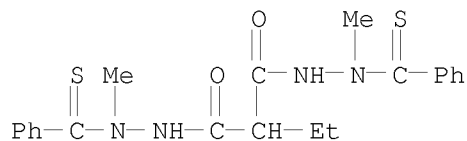
RN 488832-76-4 USPATFULL

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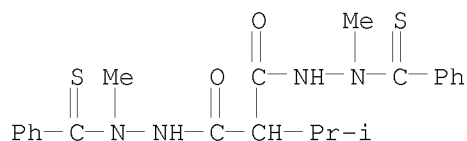
RN 488832-77-5 USPATFULL

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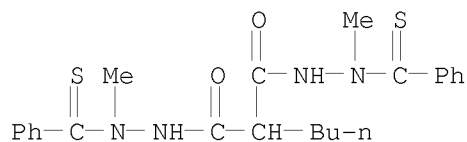
RN 488832-78-6 USPATFULL

CN Propanedioic acid, 2-(1-methylethyl)-, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



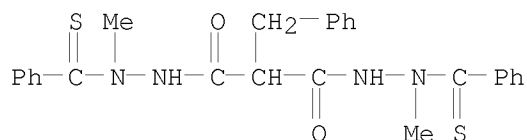
RN 488832-79-7 USPATFULL

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(9CI) (CA INDEX NAME)



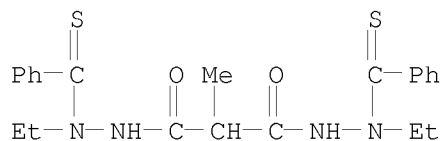
RN 488832-80-0 USPATFULL

CN Propanedioic acid, 2-(phenylmethyl)-, 1,3-bis[2-methyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



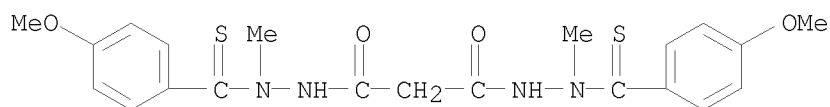
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CN Propanedioic acid, 2-methyl-, 1,3-bis[2-ethyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



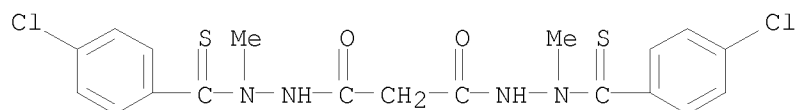
RN 488832-83-3 USPATFULL

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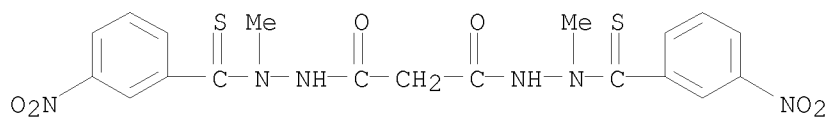
RN 488832-84-4 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(4-chlorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)

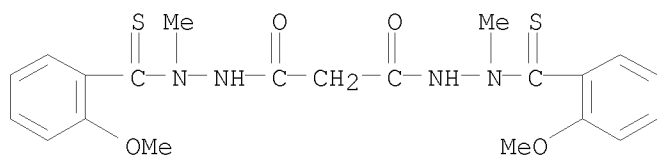


RN 488832-86-6 USPATFULL

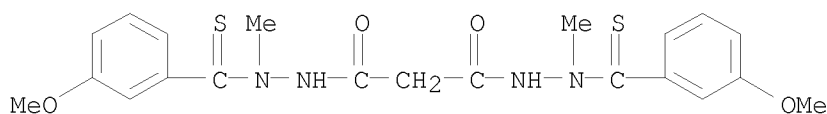
CN Propanedioic acid, 1,3-bis[2-methyl-2-[(3-nitrophenyl)thioxomethyl]hydrazide] (CA INDEX NAME)



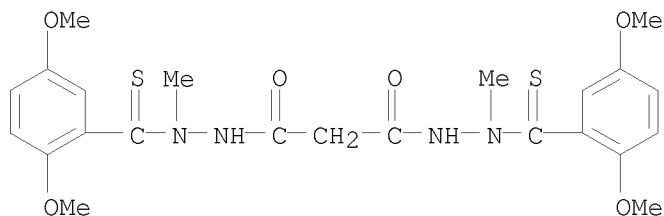
RN 488832-87-7 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



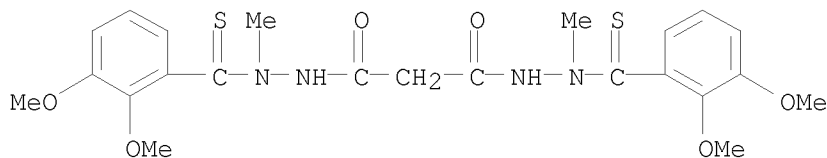
RN 488832-88-8 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(3-methoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



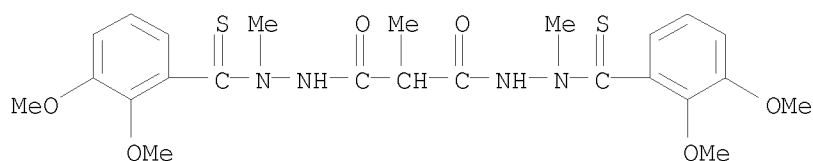
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 CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



RN 488832-92-4 USPATFULL
 CN Propanedioic acid, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)

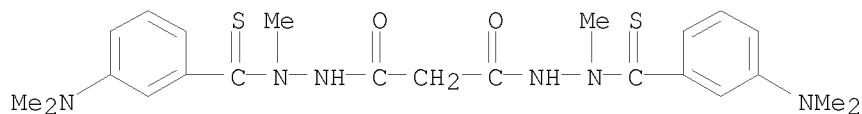


RN 488832-93-5 USPATFULL
 CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,3-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



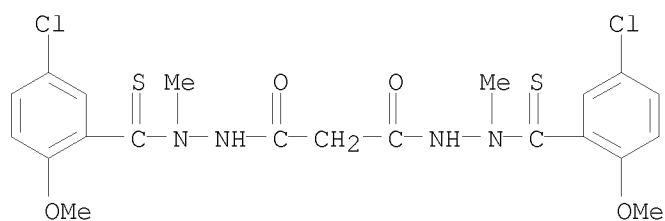
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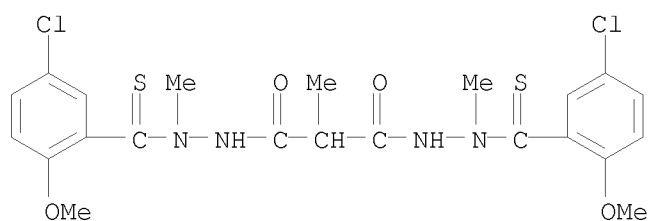
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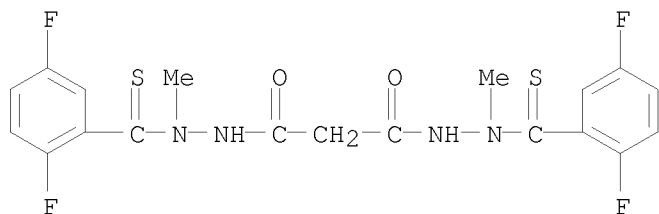
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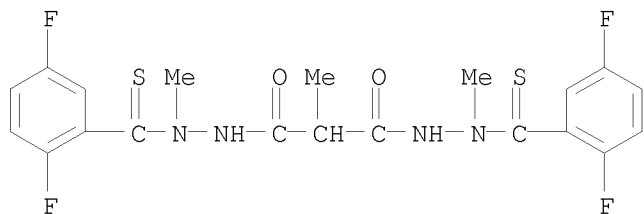
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CN Propanedioic acid, 1,3-bis[2-[[2,5-difluorophenyl]thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



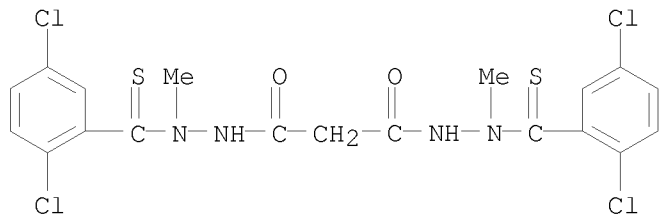
RN 488832-98-0 USPATFULL

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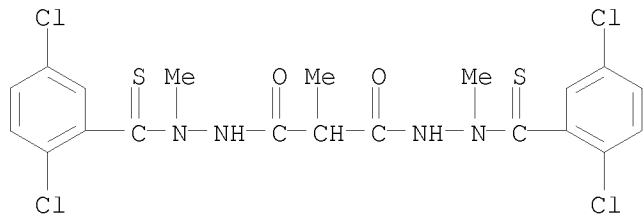
RN 488832-99-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dichlorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



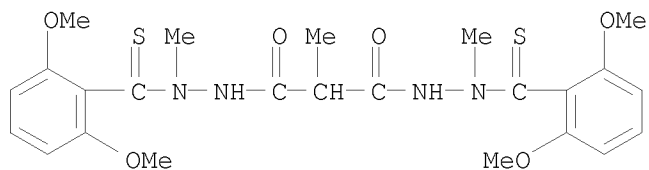
RN 488833-00-7 USPATFULL

CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,5-dichlorophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



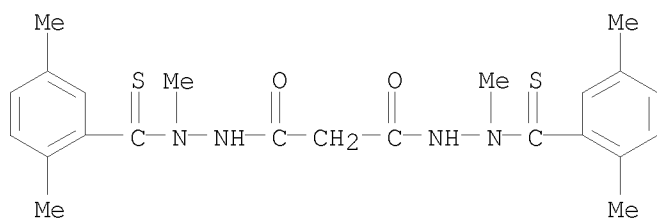
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CN Propanedioic acid, 2-methyl-, 1,3-bis[2-[(2,6-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



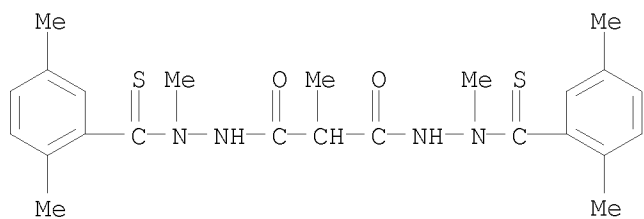
RN 488833-02-9 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



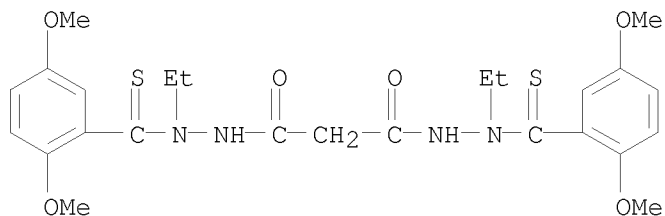
RN 488833-03-0 USPATFULL

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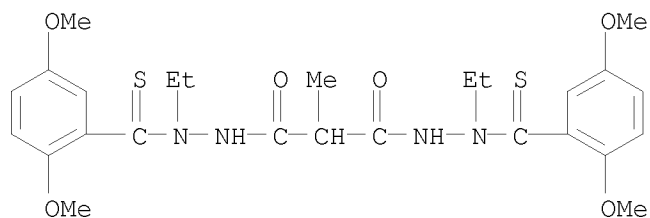
RN 488833-04-1 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(2,5-dimethoxyphenyl)thioxomethyl]-2-ethylhydrazide] (CA INDEX NAME)



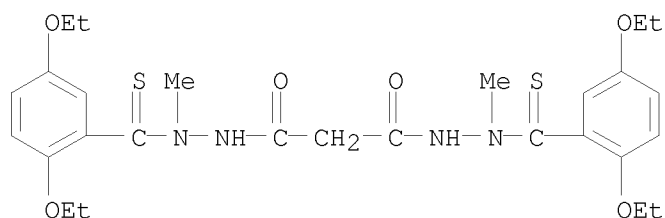
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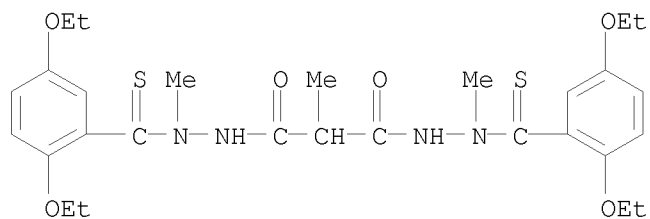
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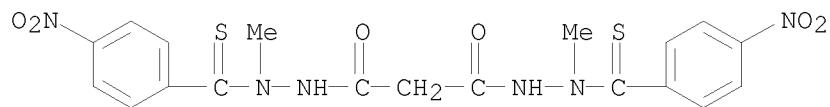
RN 488833-07-4 USPATFULL

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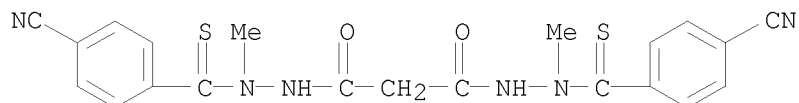
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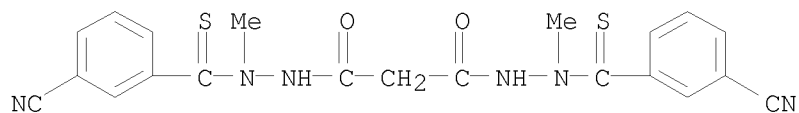
RN 488833-09-6 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(4-cyanophenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)



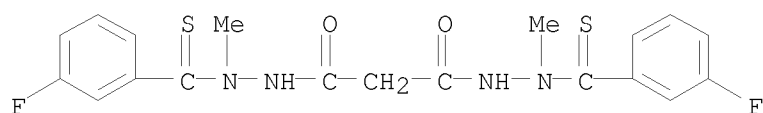
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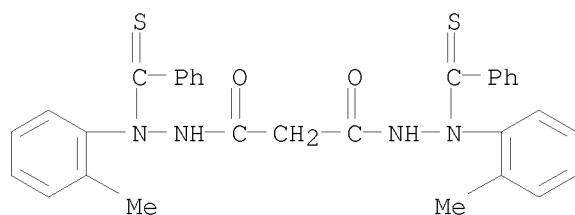
RN 488833-12-1 USPATFULL

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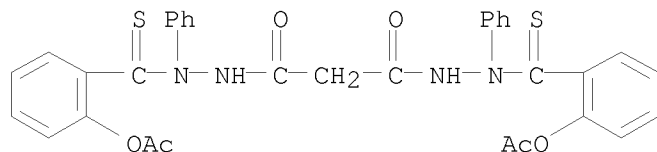
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CN Propanedioic acid, 1,3-bis[2-(2-methylphenyl)-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



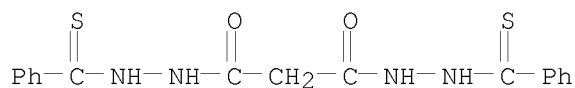
RN 488833-22-3 USPATFULL

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RN 489475-27-6 USPATFULL

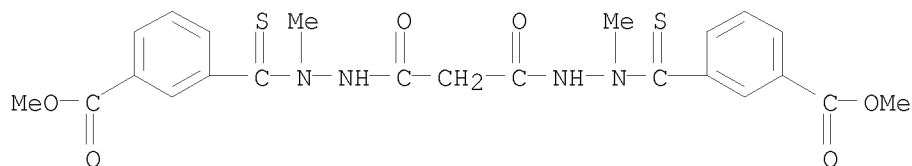
CN Propanedioic acid, 1,3-bis[2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



RN 489475-29-8 USPATFULL

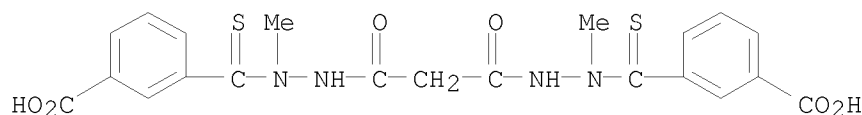
CN Propanedioic acid, bis[2-[[3-(methoxycarbonyl)phenyl]thioxomethyl]-2-

methylhydrazide] (9CI) (CA INDEX NAME)



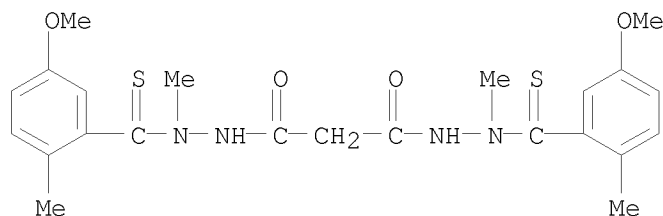
RN 489475-30-1 USPATFULL

CN Propanedioic acid, bis[2-[(3-carboxyphenyl)thioxomethyl]-2-methylhydrazide] (9CI) (CA INDEX NAME)



RN 733001-73-5 USPATFULL

CN Propanedioic acid, 1,3-bis[2-[(5-methoxy-2-methylphenyl)thioxomethyl]-2-methylhydrazide] (CA INDEX NAME)

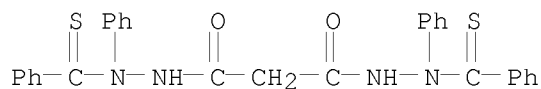


IT 488832-82-2

(reactant; preparation of malonyl dihydrazide derivs. useful for treating multi-drug resistant cancer)

RN 488832-82-2 USPATFULL

CN Propanedioic acid, 1,3-bis[2-phenyl-2-(phenylthioxomethyl)hydrazide] (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 15:53:23 ON 24 JUN 2008)

FILE 'REGISTRY' ENTERED AT 15:53:49 ON 24 JUN 2008

L1 STRUCTURE UPLOADED

L2 111 S L1 FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:54:19 ON 24 JUN 2008

L3 44 S L2
 L4 28 S L3 AND (CANCER OR TUMOR)
 L5 7 S L4 AND "MULTI-DRUG"

=> s l4 and resistant
 L6 9 L4 AND RESISTANT

=> d l6 1-9 ibib, abs

L6 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:1123448 CAPLUS
 DOCUMENT NUMBER: 145:449209
 TITLE: Methods of increasing natural killer cell activity for
 therapy
 INVENTOR(S): Barsoum, James; Du, Zhenjian
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA
 SOURCE: PCT Int. Appl., 66pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006113572	A1	20061026	WO 2006-US14320	20060413
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM AU 2006236534 A1 20061026 AU 2006-236534 20060413 CA 2603314 A1 20061026 CA 2006-2603314 20060413 EP 1871350 A1 20080102 EP 2006-750374 20060413 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU PRIORITY APPLN. INFO.: US 2005-671910P P 20050415 WO 2006-US14320 W 20060413				

OTHER SOURCE(S): MARPAT 145:449209

AB Methods of employing bis(thio-hydrazide amides) to increase natural killer (NK) cell activity in a subject in need thereof, e.g., a subject with an infection or an immunodeficiency, are provided such that the disorder is not cancer, a proliferative cell disorder, a non-infective heat shock protein 70 (Hsp70) responsive disorder, or a proteasome-inhibitor responsive disorder. Typically, a subject, e.g., a human, can be in need of increased NK cell activity has an immunodeficiency or is treated for an infection (e.g., a bacterial, viral, fungal, or parasite infection, or a combination thereof). The method includes administering to the subject an effective amount of a compound represented by R1(C:S)NR3NR7(C:Z)Y(C:Z)NR8NR4(C:S)R2 where Y is a covalent bond or an optionally substituted straight chained hydrocarbyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is an optionally substituted aromatic group; R1-R4 are independently -H, an optionally substituted aliphatic group, an optionally substituted aryl group, or R1 and R3 taken together with the carbon and

nitrogen atoms to which they are bonded, and/or R2 and R4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring; R7-R8 are independently -H, an optionally substituted aliphatic group, or an optionally substituted aryl group; Z is O or S.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:633518 CAPLUS

DOCUMENT NUMBER: 141:173877

TITLE: A preparation of malonyl dihydrazide derivatives, useful for the treatment of multi-drug resistant cancer

INVENTOR(S): Koya, Keizo; Sun, Lijun; Wu, Yaming; Korbut, Timoty; Zhou, Dan; Du, Zhenjian; Chen, Shoujun; Tatsuta, Noriaki; Liang, Guiqing; Ono, Mitsunori

PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA

SOURCE: PCT Int. Appl., 113 pp.

CODEN: PIXXD2

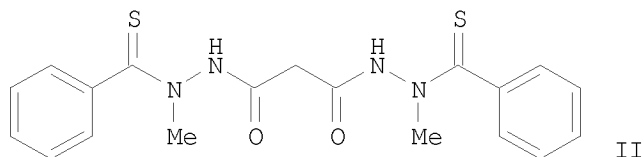
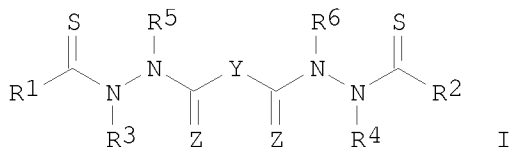
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004064826	A1	20040805	WO 2004-US1089	20040115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
AU 2004206865	A1	20040805	AU 2004-206865	20040115
AU 2004206865	B2	20060713		
CA 2512797	A1	20040805	CA 2004-2512797	20040115
US 20040225016	A1	20041111	US 2004-758589	20040115
EP 1583524	A1	20051012	EP 2004-702560	20040115
EP 1583524	B1	20060823		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006515626	T	20060601	JP 2006-500976	20040115
AT 336991	T	20060915	AT 2004-702560	20040115
ES 2271839	T3	20070416	ES 2004-702560	20040115
HK 1084024	A1	20070119	HK 2006-104252	20060407
AU 2006228035	A1	20061102	AU 2006-228035	20061011
PRIORITY APPLN. INFO.:			US 2003-440406P	P 20030115
			AU 2004-206865	A3 20040115
			WO 2004-US1089	W 20040115
OTHER SOURCE(S):		MARPAT 141:173877		
GI				



AB One embodiment of the present invention is a method of treating a subject with a multi-drug resistant cancer. The method comprises administering to the subject an effective amount of a compound represented by formula I [wherein: Y is a covalent bond or (un)substituted straight chained hydrocarbonyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is (un)substituted aromatic group; R1-R4 are independently H, aliphatic group, substituted aliphatic group, or aryl group, etc.; R5 and R6 are independently H, aliphatic group, substituted aliphatic group, (un)substituted aryl group; Z is O or S]. For instance, malonyl dihydrazide derivative II (IC50 = 0.005 μ M, multi-drug cell line MES-SA/DX5) was prepared via amidation of malonic acid by PhC(:S)N(Me)NH2 with a yield of 80% (example 4).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2008:137371 USPATFULL

TITLE: Combination with Bis(thiohydrazide amides) for treating cancer

INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080119440	A1	20080522
APPLICATION INFO.:	US 2007-897538	A1	20070830 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-841570P	20060831 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	3983	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are methods of treating a proliferative disease, such as cancer, with bis(thio-hydrazide amides) or a tautomer, pharmaceutically acceptable salt, solvate, clathrate, or prodrug thereof, in combination with hyperthermia treatment. Also disclosed are methods of treating a proliferative disease, such as cancer, with bis(thio-hydrazide amides) or a tautomer, pharmaceutically acceptable salt, solvate, clathrate, or prodrug thereof, in combination

with radiotherapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 4 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2008:136493 USPATFULL
TITLE: Bis(thiohydrazide amides) formulation
INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080118562	A1	20080522
APPLICATION INFO.:	US 2007-900201	A1	20070910 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-843941P	20060911 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	60	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2850	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are compositions and methods useful for the in vivo delivery bis(thiohydrazide amides), encased in a polymeric biocompatible shell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2007:101208 USPATFULL
TITLE: Bis(thio-hydrazide amide) formulation
INVENTOR(S): Lunsmann, Walter J., Harvard, MA, UNITED STATES
Deshpanday, Ninad, Cary, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20070088057	A1	20070419
APPLICATION INFO.:	US 2006-502590	A1	20060810 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-708977P	20050816 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	86	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2169	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are compositions comprising a compound represented by structural formula (I): ##STR1## 2 g of which is reconstitutable in 10 mL of a water in less than 10 minutes, and methods for preparing these compositions. Also disclosed are compositions comprising a compound represented by structural formula (I) and a pharmaceutically acceptable excipient, wherein the molar ratio of said compound to said excipient is from 1:20 to 1:1, and methods for preparing these compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2006:167882 USPATFULL
TITLE: Bis(thio-hydrazide amides) for treatment of hyperplasia
INVENTOR(S): Sherman, Matthew L., Newton, MA, UNITED STATES
Vaghefi, Farid, Burlington, MA, UNITED STATES
Chen, Lan Bo, Lexington, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060142393	A1	20060629
APPLICATION INFO.:	US 2005-226929	A1	20050914 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-610270P	20040916 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	44	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	2506	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and medical devices for treating a proliferative disorder in a subject, e.g., restenosis in a blood vessel that has been implanted with a stent, employ a bis(thio-hydrazide amide) represented by Structural Formula I or a pharmaceutically acceptable salt or solvate thereof.
##STR1## Y is a covalent bond or an optionally substituted straight chained hydrocarbyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is an optionally substituted aromatic group.

R.sub.1-R.sub.4 are independently --H, an optionally substituted aliphatic group, an optionally substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring.

R.sub.7-R.sub.8 are independently --H, an optionally substituted aliphatic group, or an optionally substituted aryl group. Z is O or S.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 7 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2006:167875 USPATFULL
TITLE: Bis(thio-hydrazide amides) for increasing Hsp70 expression
INVENTOR(S): Barsoum, James, Lexington, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060142386	A1	20060629
APPLICATION INFO.:	US 2005-281923	A1	20051117 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-629595P	20041119 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US

NUMBER OF CLAIMS: 51

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Page(s)

LINE COUNT: 1873

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating a Hsp70-responsive disorder in a subject includes administering to the subject an effective amount of a compound represented by Structural Formula I, or a pharmaceutically acceptable salt or solvate thereof. ##STR1## Y is a covalent bond or an optionally substituted straight chained hydrocarbyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is an optionally substituted aromatic group.

R.sub.1-R.sub.4 are independently --H, an optionally substituted aliphatic group, an optionally substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring.

R.sub.7-R.sub.8 are independently --H, an optionally substituted aliphatic group, or an optionally substituted aryl group. Z is O or S.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2006:160058 USPATFULL

TITLE: Bis(thio-hydrazide amide) salts for treatment of cancers

INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES
Sun, Lijun, Harvard, MA, UNITED STATES
Kostik, Elena, Arlington, MA, UNITED STATES
Vaghefi, Farid, Burlington, MA, UNITED STATES
Chen, Shoujun, Bedford, MA, UNITED STATES
Tatsuta, Noriaki, Lexington, MA, UNITED STATES
Liang, Guiqing, Concord, MA, UNITED STATES
Inoue, Takayo, Malden, MA, UNITED STATES
Xia, Zhi-Qiang, Acton, MA, UNITED STATES

PATENT ASSIGNEE(S): Synta Pharmaceuticals, Lexington, MA, UNITED STATES
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060135595	A1	20060622
	US 7385084	B2	20080610
APPLICATION INFO.:	US 2005-157213	A1	20050620 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-582596P	20040623 (60)
	US 2005-681368P	20050516 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US

NUMBER OF CLAIMS: 31

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 24 Drawing Page(s)

LINE COUNT: 2028

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are bis(thio-hydrazide amide) disalts, which are represented by Structural Formula (I): ##STR1##

Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group. R.sub.1-R.sub.4 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. Z is --O or --S. M.sup.+ is a pharmaceutically acceptable monovalent cation and M.sup.2+ is a pharmaceutically acceptable divalent cation. Also, disclosed are pharmaceutical compositions comprising a bis(thio-hydrazide amide) disalt described above. Further disclosed are methods of treating a subject with cancer. The methods comprise the step of administering an effective amount of a bis(thio-hydrazide amide) disalt described above.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 9 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2004:286848 USPATFULL

TITLE: Treatment for cancers

INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES
Sun, Lijun, Harvard, MA, UNITED STATES
Wu, Yaming, Lexington, MA, UNITED STATES
Korbut, Timothy, Brighton, MA, UNITED STATES
Zhou, Dan, Lexington, MA, UNITED STATES
Du, Zhenjian, Northborough, MA, UNITED STATES
Chen, Shoujun, Bedford, MA, UNITED STATES
Tatsuta, Noriaki, Lexington, MA, UNITED STATES
Liang, Guiqing, Concord, MA, UNITED STATES
Ono, Mitsunori, Lexington, MA, UNITED STATES

PATENT ASSIGNEE(S): Synta Pharmaceuticals Corporation, Lexington, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20040225016	A1	20041111
APPLICATION INFO.:	US 2004-758589	A1	20040115 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-440406P	20030115 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	
LINE COUNT:	2511	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB One embodiment of the present invention is a method of treating a subject with a multi-drug resistant cancer. The method comprises administering to the subject an effective amount of a compound represented by Structural Formula (I): ##STR1##

Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group, or, Y, taken together with both>C=Z groups to which it is bonded, is a substituted or unsubstituted aromatic group.

R.sub.1-R.sub.4 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. Preferably R.sub.1 and R.sub.2 are the same and R.sub.3 and R.sub.4 are the same.

R.sub.5-R.sub.6 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group.

Z is .dbd.O or .dbd.S.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 15:53:23 ON 24 JUN 2008)

FILE 'REGISTRY' ENTERED AT 15:53:49 ON 24 JUN 2008

L1 STRUCTURE UPLOADED
L2 111 S L1 FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:54:19 ON 24 JUN 2008

L3 44 S L2
L4 28 S L3 AND (CANCER OR TUMOR)
L5 7 S L4 AND "MULTI-DRUG"
L6 9 S L4 AND RESISTANT

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=> s l4 and pd<2004
2 FILES SEARCHED...

L8 5 L4 AND PD<2004

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L8 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:818151 CAPLUS

DOCUMENT NUMBER: 139:323341

TITLE: Preparation of thiobenzoylhydrazide derivatives as taxol enhancers for treatment of cancer

INVENTOR(S): Koya, Keizo; Sun, Lijun; Chen, Shoujun; Tatsuta, Noriaki; Wu, Yaming; Ono, Mitsunori

PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 63 pp., Cont.-in-part of U.S. Ser. No. 193,075.

CODEN: USXXCO

DOCUMENT TYPE: Patent

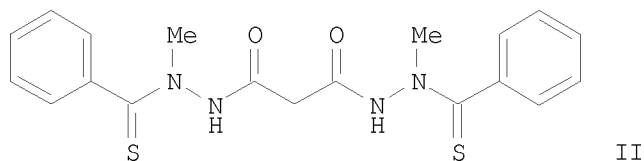
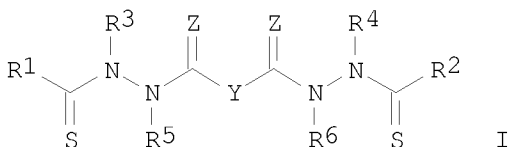
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

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US 6924312	B2	20050802		
US 20030045518	A1	20030306	US 2002-193639	20020710 <--

US 6762204	B2	20040713		
US 20030119914	A1	20030626	US 2002-193075	20020710 <--
US 6800660	B2	20041005		
EP 1731148	A1	20061213	EP 2006-19066	20020710
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, SK, TR, AL, LT, LV, MK, RO, SI				
ZA 2004001051	A	20050622	ZA 2004-1051	20040209
ZA 2004001054	A	20050622	ZA 2004-1054	20040209
US 20040235909	A1	20041125	US 2004-803798	20040318
US 7001923	B2	20060221		
US 20050009920	A1	20050113	US 2004-846152	20040514
US 7037940	B2	20060502		
US 20060116374	A1	20060601	US 2005-244427	20051005
US 7368473	B2	20080506		
US 20060122183	A1	20060608	US 2005-244324	20051005
US 7345094	B2	20080318		
PRIORITY APPLN. INFO.:			US 2001-304252P	P 20010710
			US 2002-361936P	P 20020306
			US 2002-361946P	P 20020306
			US 2002-193075	A2 20020710
			US 2002-193639	A2 20020710
			EP 2002-746947	A3 20020710
			US 2004-803798	A1 20040318
			US 2004-846152	A1 20040514
OTHER SOURCE(S):			MARPAT 139:323341	
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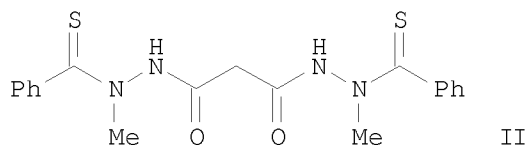
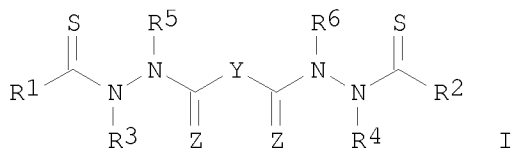


AB The title compds. I [wherein Y = a single bond, phenylene, or (un)substituted hydrocarbyl, etc.; R1 and R2 = independently (un)substituted aryl; R3-R6 = independently H, (un)substituted aliphatic group, or aryl; Z = O or S; etc.] and pharmaceutically acceptable salts thereof are prepared as taxol enhancers for treatment of cancer. For example, the compound II was prepared in a multi-step synthesis. Also disclosed is a method of treating a subject with cancer by administering to the subject a compound of I in combination with taxol or an analog of taxol. II showed synergistic anticancer activity with paclitaxel in rat.

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2003:58057 CAPLUS
 DOCUMENT NUMBER: 138:122398
 TITLE: Preparation of bis(thiohydrazide) derivatives as taxol enhancer compounds
 INVENTOR(S): Koya, Keizo; Sun, Lijun; Chen, Shoujun; Tatsuta,

PATENT ASSIGNEE(S): Noriaki; Wu, Yaming; Ono, Mitsunori
 SOURCE: SBR Pharmaceuticals Corp., USA
 PCT Int. Appl., 105 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003006430	A1	20030123	WO 2002-US21717	20020710 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2455453	A1	20030123	CA 2002-2455453	20020710 <--
AU 2002316626	A1	20030129	AU 2002-316626	20020710 <--
AU 2002316626	B2	20050602		
EP 1406869	A1	20040414	EP 2002-746947	20020710
EP 1406869	B1	20060913		
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BR 2002011227	A	20040810	BR 2002-11227	20020710
JP 2004534848	T	20041118	JP 2003-512202	20020710
CN 1553895	A	20041208	CN 2002-817733	20020710
NZ 530963	A	20050826	NZ 2002-530963	20020710
AT 339402	T	20061015	AT 2002-746947	20020710
EP 1731148	A1	20061213	EP 2006-19066	20020710
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ES 2271292	T3	20070416	ES 2002-746947	20020710
NO 2004000095	A	20040223	NO 2004-95	20040109
MX 2004PA00244	A	20050307	MX 2004-PA244	20040109
ZA 2004001051	A	20050622	ZA 2004-1051	20040209
ZA 2004001054	A	20050622	ZA 2004-1054	20040209
HK 1060115	A1	20061124	HK 2004-103011	20040429
US 20060116374	A1	20060601	US 2005-244427	20051005
US 7368473	B2	20080506		
US 20060122183	A1	20060608	US 2005-244324	20051005
US 7345094	B2	20080318		
PRIORITY APPLN. INFO.:				
			US 2001-304252P	P 20010710
			US 2002-361946P	P 20020306
			US 2002-361936P	P 20020306
			EP 2002-746947	A3 20020710
			US 2002-193075	A1 20020710
			US 2002-193639	A1 20020710
			WO 2002-US21717	W 20020710
			US 2004-803798	A1 20040318
			US 2004-846152	A1 20040514
OTHER SOURCE(S):				
MARPAT 138:122398				
GI				



AB Title compds. I [Y = bond, phenylene, hydrocarbyl or taken together with both >C=Z groups is aromatic; R1-2 = (un)substituted aryl; R3-4 = H, alkyl, aryl; R5-6 = H, alkyl, aryl; Z = O, with provisions] and analogs are prepared For instance, thiobenzoic acid N-methylhydrazide (preparation given) was added to malonyl dichloride to give bis-hydrazide II. The combination of example compds. and paclitaxel administered to mice with tumors (MDA-435) resulted in greater tumor reduction than either active component given alone.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:58056 CAPLUS

DOCUMENT NUMBER: 138:122397

TITLE: Process for the preparation of bis(thiohydrazide) derivatives used as Taxol enhancers

INVENTOR(S): Chen, Shoujun; Sun, Lijun; Xia, Zhi-Qiang; Koya, Keizo; Ono, Mitsunori

PATENT ASSIGNEE(S): SBR Pharmaceuticals Corp., USA

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

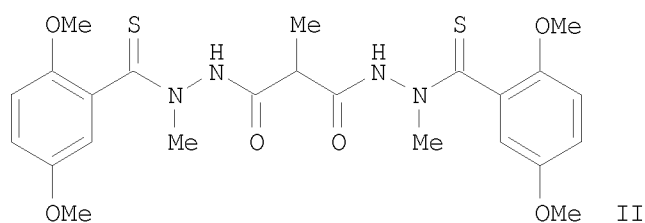
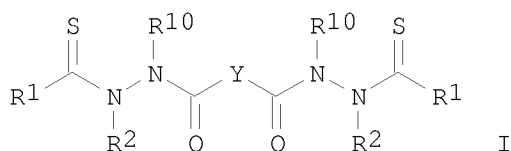
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003006429	A1	20030123	WO 2002-US21716	20020710 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
TW 252847	B	20060411	TW 2002-91115205	20020709
CA 2453415	A1	20030123	CA 2002-2453415	20020710 <--
AU 2002316625	A1	20030129	AU 2002-316625	20020710 <--
AU 2002316625	B2	20060525		
US 20030069225	A1	20030410	US 2002-193076	20020710 <--
US 6825235	B2	20041130		
EP 1406868	A1	20040414	EP 2002-746946	20020710

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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JP 2004534847	T	20041118	JP 2003-512201	20020710
CN 1553893	A	20041208	CN 2002-817724	20020710
NO 2004000053	A	20040210	NO 2004-53	20040107
MX 2004PA00245	A	20050307	MX 2004-PA245	20040109
IN 2004DN00077	A	20060224	IN 2004-DN77	20040112
US 20040229952	A1	20041118	US 2004-807919	20040324
US 7074952	B2	20060711		
US 20060281811	A1	20061214	US 2006-440429	20060524
AU 2006203689	A1	20060914	AU 2006-203689	20060824
PRIORITY APPLN. INFO.:			US 2001-304318P	P 20010710
			US 2002-193076	A1 20020710
			WO 2002-US21716	W 20020710
			US 2004-807919	A1 20040324

OTHER SOURCE(S): CASREACT 138:122397; MARPAT 138:122397
 GI



AB Disclosed is a method of preparing bis(thiohydrazide) I [R1-2 = aliphatic, aryl, etc.; R10 = H, alkyl; Y = bond, hydrocarbyl]. The method comprises reacting a hydrazide with a thionation reagent followed by reaction of the thiohydrazide with Z-C(O)-Y-C(O)-Z or HO-C(O)-Y-C(O)-OH [Z = leaving group; Y is as defined above] and a carboxylic acid activating agent to produce I. For instance, 2,5-dimethoxybenzoic acid is coupled to methylhydrazine (CH₂Cl₂, DCC, DMAP); the resulting hydrazide is treated with Lawesson's reagent and the product reacted with 2-methylmalonic acid (DMF, DCC) to give II. I enhance the anti-cancer activity of taxol and analogs thereof.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2003:277231 USPATFULL

TITLE: Taxol enhancer compounds

INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES
 Sun, Lijun, Harvard, MA, UNITED STATES
 Chen, Shoujun, Bedford, MA, UNITED STATES
 Tatsuta, Noriaki, Lexington, MA, UNITED STATES
 Wu, Yaming, Lexington, MA, UNITED STATES

PATENT ASSIGNEE(S): Ono, Mitsunori, Lexington, MA, UNITED STATES
Synta Pharmaceuticals Corp., Lexington, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20030195258	A1	20031016	<--
	US 6924312	B2	20050802	
APPLICATION INFO.:	US 2003-345885	A1	20030115	(10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-193075, filed on 10 Jul 2002, PENDING			
	Continuation-in-part of Ser. No. US 2002-193639, filed on 10 Jul 2002, PENDING			

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-304252P	20010710 (60)
	US 2002-361946P	20020306 (60)
	US 2001-304252P	20010710 (60)
	US 2002-361936P	20020306 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133	
NUMBER OF CLAIMS:	118	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	28 Drawing Page(s)	
LINE COUNT:	2354	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

AB Disclosed is a compound represented by the Structural Formula (I):
##STR1##

Y is a covalent bond, a phenylene group or a substituted or unsubstituted straight chained hydrocarbyl group. In addition, Y, taken together with both >C.dbd.Z groups to which it is bonded, is a substituted or unsubstituted aromatic group. Preferably, Y is a covalent bond or --C(R.sub.7R.sub.8)--.

R.sub.1 and R.sub.2 are independently an aryl group or a substituted aryl group, R.sub.3 and R.sub.4 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group.

R.sub.5-R.sub.6 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group.

R.sub.7 and R.sub.8 are each independently --H, an aliphatic or substituted aliphatic group, or R.sub.7 is --H and R.sub.8 is a substituted or unsubstituted aryl group, or, R.sub.7 and R.sub.8, taken together, are a C1-C6 substituted or unsubstituted alkylene group.

Z is .dbd.O or .dbd.S.

Also disclosed are pharmaceutical compositions comprising the compound of the present invention and a pharmaceutically acceptable carrier or diluent. Also disclosed is a method of treating a subject with cancer by administering to the subject a compound of Structural Formula (I) in combination with taxol or an analog of taxol.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 5 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2003:100114 USPATFULL

TITLE: Synthesis of taxol enhancers
 INVENTOR(S): Chen, Shoujun, Billerica, MA, UNITED STATES
 Sun, Lijun, Harvard, MA, UNITED STATES
 Xia, Zhi-Qiang, Dedham, MA, UNITED STATES
 Koya, Keizo, Brookline, MA, UNITED STATES
 Ono, Mitsunori, Lexington, MA, UNITED STATES
 PATENT ASSIGNEE(S): Shionogi BioResearch Corp., Lexington, MA (U.S.
 corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20030069225	A1	20030410	<--
	US 6825235	B2	20041130	
APPLICATION INFO.:	US 2002-193076	A1	20020710	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-304318P	20010710 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133	
NUMBER OF CLAIMS:	60	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1181	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of preparing a thiohydrazide product compound from a hydrazide starting compound. The hydrazide starting compound is represented by Structural Formula (I): ##STR1##

The thiohydrazide product compound is represented by Structural Formula (II): ##STR2##

In Structural Formulas (I)-(II), R.sub.1 and R.sub.2 are independently an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.2 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. When R.sub.2 is an aryl group or a substituted aryl group, then R.sub.5 is a hydrazine protecting group; and when R.sub.2 is an aliphatic or substituted aliphatic group, then R.sub.5 is --H or a hydrazine protecting group. R.sub.10 is --H or a substituted or unsubstituted alkyl group. The method comprising the step of reacting the starting compound with a thionylating reagent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

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L1 STRUCTURE UPLOADED
 L2 111 S L1 FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:54:19 ON 24 JUN 2008

L3 44 S L2
 L4 28 S L3 AND (CANCER OR TUMOR)
 L5 7 S L4 AND "MULTI-DRUG"
 L6 9 S L4 AND RESISTANT

L7 0 S L4 AND PD<=20030115
L8 5 S L4 AND PD<2004

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	ENTRY	SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-4.80	-4.80

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